

North South Gasoline Pricing Study



Ontario

Ministry of Energy
Honourable Vincent G. Kerrio
Minister



Energy
Ontario

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NORTH SOUTH GASOLINE
PRICING STUDY

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EXECUTIVE SUMMARY

Retail gasoline prices are higher in northern Ontario than they are in the south. This is an issue of concern to residents of the north, who have frequently expressed the view that the price differences are larger than could be explained by differences in distribution costs.

To address these concerns, the Honourable David Peterson, in his speech to the legislature on July 2, 1985 announced that a study of price differences would be undertaken. This report is the result of that commitment.

The study examined the structure of the gasoline retailing industry, starting with its rapid development following the second world war. A detailed analysis of prices and the factors that affected them during the course of the study was undertaken, with particular emphasis on those factors where differences could be identified between northern and southern Ontario.

Several events which seem destined to have a profound impact on the future of gasoline marketing occurred either during the study or so shortly before it that their effects could not be observed. These events include the implementation of the Western Accord, Petro-Canada's purchase of the Ontario assets of Gulf Canada Limited and the introduction by Imperial Oil of rack pricing. The implications of these events are discussed, but, because of their timing, the impact on the market could not be analysed.

Summary of Causes of Price Differences

While the retailing of gasoline is extremely complex, involving the interplay of a large number of factors, the principal causes of price differences can be stated as follows:

- a) The market in the south is larger and therefore experiences more competition.
- b) Average volumes per outlet are lower in the north, changing the retailers' attitudes toward gasoline and making them less aggressive.
- c) The distribution and retailing of gasoline in the north are less efficient.

The study also found that:

Price Differences

- (1) Northern retail gasoline prices are almost always higher than those in the south

This fact remains true even when there is no price war activity in the south.

- (2) Price war activity occurs more frequently in the south

This increases the average difference in prices between north and south. Differences also occur between urban and rural centres, particularly in northern Ontario.

- (3) The differences between urban and rural prices in northern Ontario are usually greater than those between northern and southern cities.

Cost Differences

Cost differences occur at both the wholesale and the retail level.

- (4) Wholesale cost differences result from greater distribution costs in the north.

All Ontario's refineries are located near the major markets of southern Ontario. Distribution costs are higher in the north because of the greater distances and because the average station in the north is smaller, resulting in less efficient delivery.

- (5) Retail cost differences are largely the result of lower average volumes in the north

The average station in the south sells about 75 per cent more gasoline than its northern counterpart. This has major impacts on unit costs and on sales of other products and services.

- (6) In most cases, distribution cost differences exceed differences in price.

Only in severe price war situations do price differentials grow to the point where they exceed incremental distribution costs.

- (7) Over the period of the study, the average difference in retail prices between north and south was 4.2 cents per litre.
- (8) At this level of difference, the annual incremental cost to a northern motorist is about \$130

This is based on a car driving 20,000 kilometres a year and consuming 3,000 litres of gasoline.

Market Differences

- (9) Company operated stations, branded lessee dealers, jobber outlets and fighting brands are relatively more common in the south. Dealer owned stations both those displaying their own and refiner brands are relatively more common in the north.
- (10) The overall market in northern Ontario is substantially smaller than that in the south. Less than ten percent of Ontario's population lives in the north.

Because of its greater area, communities in Northern Ontario tend to be isolated from one another. By contrast communities in the south are often close enough together to influence one another. As a result:

- (11) The market for gasoline in the north is separated into a number of independent sub-markets, while that in the south is more homogeneous.

The larger size of the market in the south makes prices lower there for several reasons. A wider choice of brands is offered; traffic flow past stations is greater; stations are closer together; a greater mix of services is offered. All these factors have been identified as raising the level of competition and lowering prices.

Network Inefficiencies

Several inefficiencies were uncovered in the retailing of gasoline. One is more significant than the others:

- (12) There are more outlets than are required to serve the market. This lowers average volumes and raises costs, particularly in Northern Ontario.

The market is working to correct these inefficiencies, but the correction requires capital investments at a time when funds are scarce due to declining profits and the demand for funds for alternate users. Rationalization has tended to occur where the expected return on the capital invested is highest. This has usually been in the larger markets of southern Ontario.

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CHAPTER 1: INTRODUCTION

The market for gasoline in Ontario is undergoing a period of profound change caused mostly by a reversal of a long-standing growth trend which started in the years following the second world war and ended in 1980.

Declining markets for gasoline and other petroleum products have resulted in fierce competition among refiners to maintain sales at levels which allow them to operate their refineries efficiently.

In recent years, the industry has been characterized by refinery closures, increased market concentration, retail price wars and rationalization of the retail system. The last two of these effects were not felt evenly across the province. Together, they have resulted in an increase in the difference in gasoline prices between northern and southern Ontario.

This report analyses the price differences across the province, and seeks to explain them in terms of the forces at work in the marketplace.

Generally, the forces which affect the gasoline market are not clearly understood or accepted by the consumer. In particular, differences in gasoline prices between northern and southern Ontario have been cited frequently by residents of northern Ontario as being unreasonable or unjustified.

Ontario motorists spend more than five billion dollars annually on gasoline. Gasoline sales account for about 4 per cent of consumer expenditures. This is about half what the average consumer spends on clothing. But gasoline attracts a very high level of price consciousness on the part of consumers.

Like many other commodities, gasoline is more highly priced in northern Ontario than it is in the south. To understand the reasons underlying this phenomenon, it was necessary to examine in some detail the structure of the gasoline retailing market and the forces that affect it. The following report focuses on price differences between north and south and the reasons for them, but it also provides some insights into the overall working of the market, including the reasons for price differences within regions.

The report was prepared by the Ministry of Energy in cooperation with the Ministry of Northern Development and Mines.

SCOPE AND METHOD

The study is based on data available to the Ministry from its ongoing monitoring activities, data collected specifically for the purpose of the study and published data, including the results of previous studies.

Weekly pricing data were collected for seventy six communities in northern Ontario and twenty seven communities in southern Ontario during the period of the study, that is from July 3 to November 27.

Nine communities in northern Ontario and three in southern Ontario were selected for more detailed analysis. For each centre, locally hired students recorded all price changes over a period of one week. In addition, a complete description of the retail marketing network was obtained. Comparisons of the service station population uncovered key differences between north and south.

Interviews were held with the major oil companies operating in Ontario. They were asked to describe their distribution systems and provide comparative cost data for delivery to stations in different parts of the province. In addition, discussions were held with each on the market forces involved, with particular emphasis on those which resulted in price differences between northern and southern Ontario.

Various organizations involved in the industry were also interviewed. These organizations included those representing the refiners and both branded and independent dealers. As well, several individual dealers were interviewed.

A consultant knowledgeable in the gasoline retail industry provided background information on the retail industry and an independent assessment of the reasons for differences in prices. The consultant had access to all data collected in the study and assisted in its interpretation.

Inquiries into the pricing and marketing of gasoline have been conducted in the past. The reports of these studies were examined by the consultant.

The consultant also reviewed the experiences on this issue of other Canadian jurisdictions, as well as those of the United States and Europe.

The methodology used in this study is given in more detail in Appendix A. Summaries of the other studies are given in Appendix B.

CHAPTER 2: GASOLINE PRICE DIFFERENCES IN ONTARIO

HIGHLIGHTS

- . Prices are higher in northern Ontario than they are in the south.
- . Prices are more stable in northern Ontario than in southern Ontario.
- . In northern Ontario, the smaller and more remote a community, the higher the price.
- . The less accessible the market, the less price activity there is in the market.
- . Over the course of the study, the average price difference between northern and southern Ontario was 4.2 cents per litre.
- . However, toward the end of the study, the average price difference narrowed considerably.
- . The additional cost to the northern motorist of higher gasoline prices is probably less than \$130 per personal use vehicle.

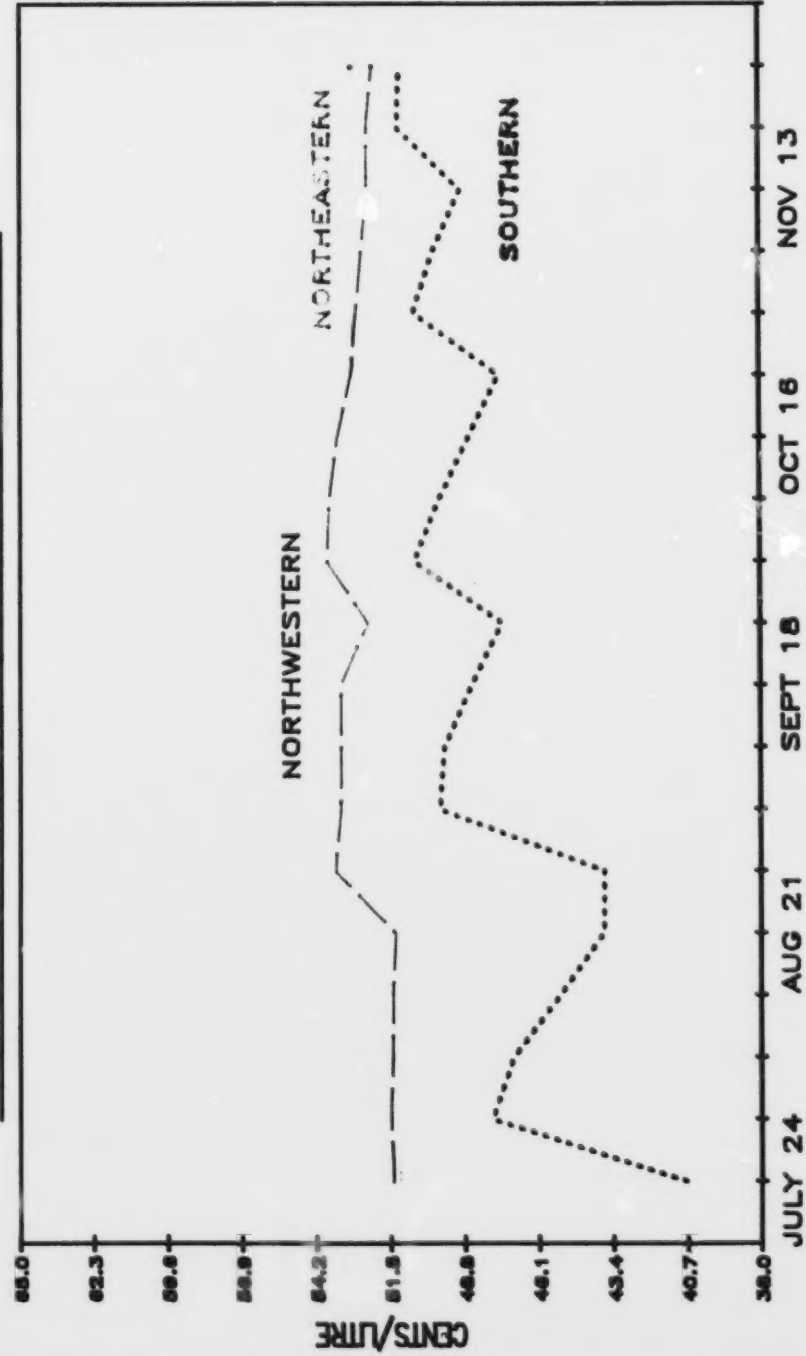
Analysis of the information collected revealed several kinds of price differences. The following charts help explain them.

NORTH-SOUTH PRICE DIFFERENCES

In Figure 2.1 the surveyed locations are grouped into three geographic areas. For each group the average price is shown for a number of weeks. These averages show the following things:

- Average prices are higher in northern Ontario than in southern Ontario. Throughout most of the survey period, prices were slightly higher in the northwest than in the northeast. However, toward the end of the period, average prices in the northwest fell below those further east.
- Prices are more stable in northern Ontario than in southern Ontario.

Figure 2.1
NORTH VS SOUTH GASOLINE PRICES



SOURCE: ONTARIO GOVERNMENT SURVEYS

To understand these averages fully, it is important to know two things the figure does not show:

- The range of prices being averaged is much wider in the three northern areas than in the south. Of course the geographic areas they cover are many times that of southern Ontario. But across the south, prices in different locations tend to be much closer together than they are across the north.
- The averages are based on prices in surveyed areas only. They are weighted according to the population of each community. Thus they do not allow for variations in per capita consumption or for differences in the amount of out-of-town traffic.

Over the period of the study, prices in northern Ontario, on average were just over four cents per litre higher than those in the south.

PRICE DIFFERENCES AND COMMUNITY TYPES

Figure 2.2 shows another important characteristic of northern gasoline prices. The four northern communities named have been found to represent four different types of market. In size and in accessibility to urban centres they represent gradations:

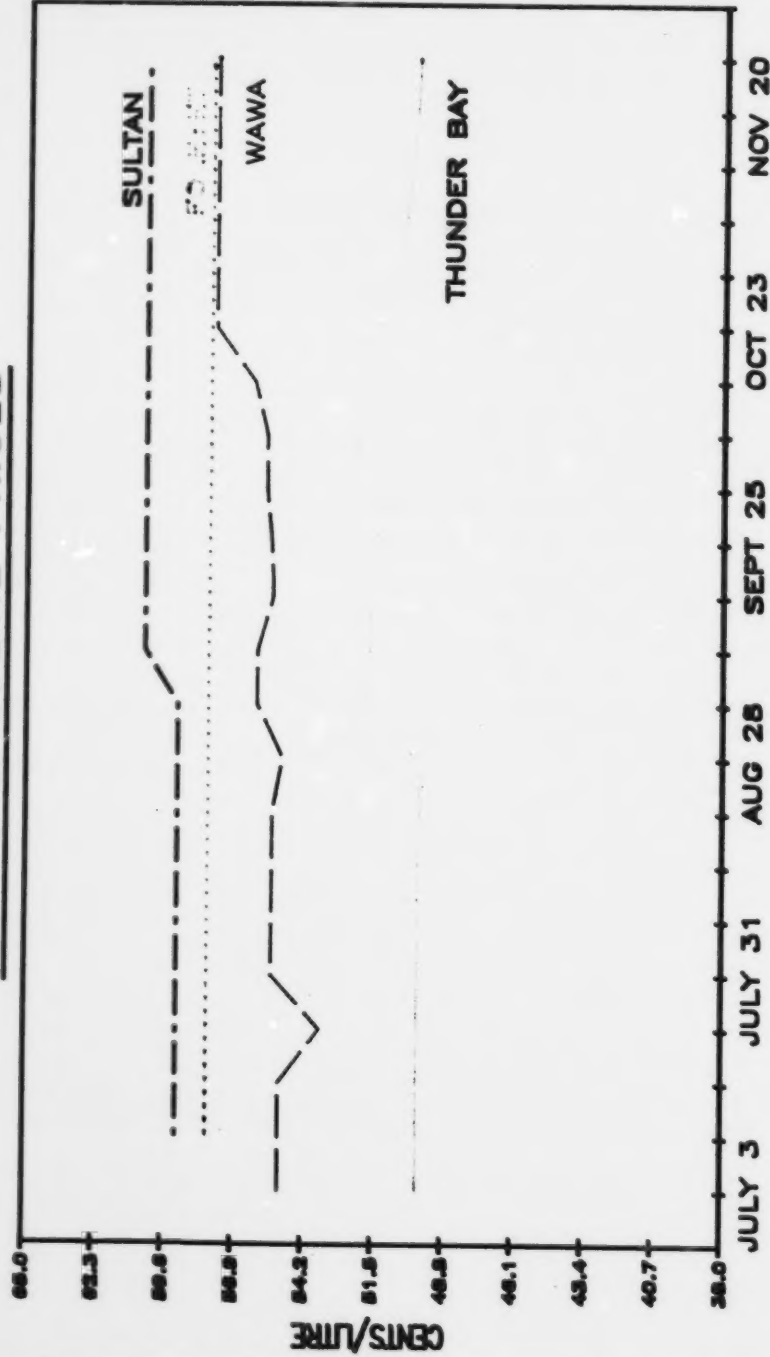
- Thunder Bay - a major urban area
- Wawa - a town located on a major highway
- Foleyet - a small town located on a secondary highway
- Sultan - a village at the end of a minor highway.

The average gasoline prices in these northern communities have been plotted, and the results indicate the following conclusion:

- The smaller and more remote the community, the higher the price.

The number of service stations involved varies from community to community, so that an average price based on the total quantity of gasoline sold in the four communities would be much closer to the lowest average, that for Thunder Bay, than to the others.

Figure 2.2
NORTHERN ONTARIO
RETAIL GASOLINE PRICES



SOURCE: ONTARIO GOVERNMENT SURVEYS

The survey results indicate that in explaining price levels community size is less important than remoteness. In both northern and southern Ontario, smaller communities near cities tend to reflect the city prices. In southern Ontario most small communities are close enough to cities to be influenced by them. The greater distances between cities in northern Ontario mean that smaller communities tend to be beyond urban influence and to have higher prices.

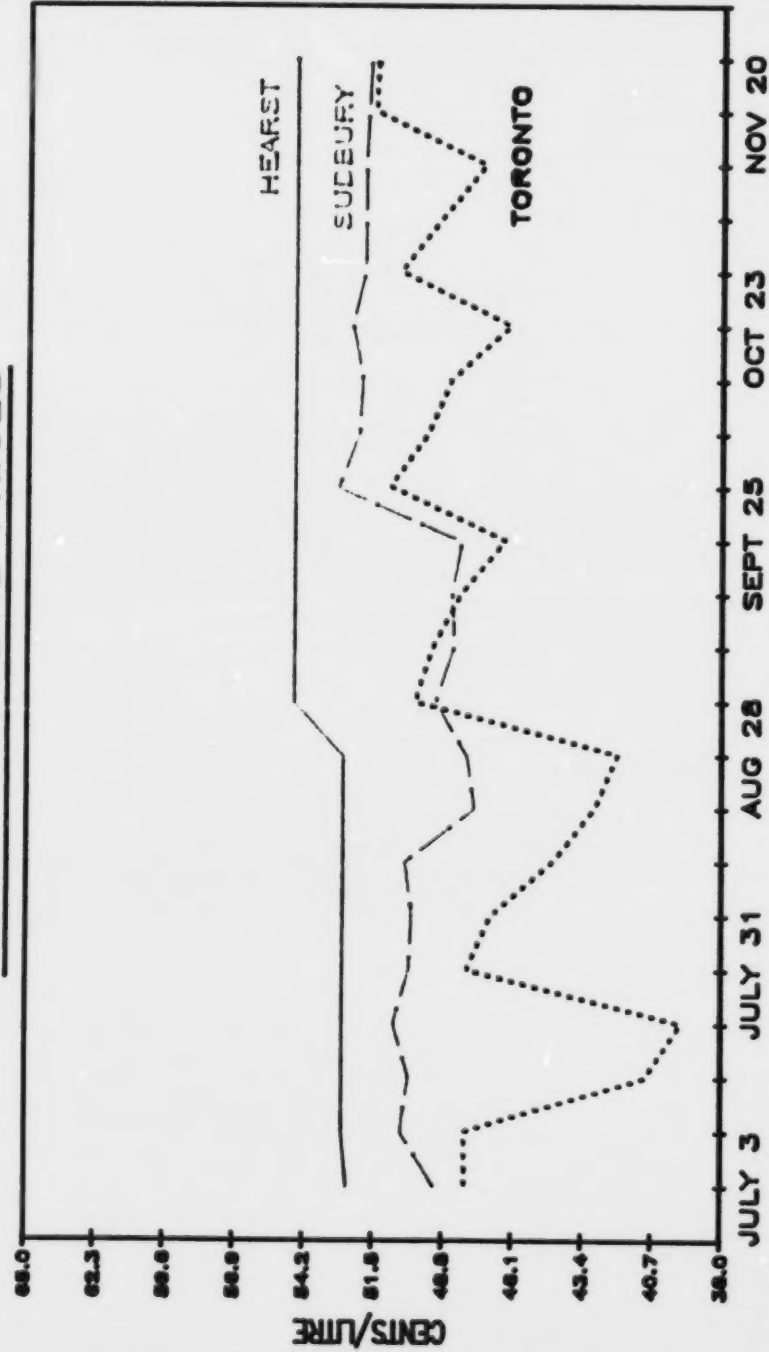
REGIONAL PRICE DIFFERENCES

Figure 2.3 shows average prices in three markets. These regional prices differ in both absolute level and variability.

The differences in variability are determined by local market forces. Toronto experiences continual and intense price wars; Sudbury has fewer wars, and they depress prices less; Hearst is nearly immune from price wars. The retail effect of the increase in federal excise tax on September 4 is visible for Hearst but is lost in the general market activity for Sudbury and Toronto. In general, the less accessible the market and the higher the prices, the less price activity there is in the market.

Figures 2.4 to 2.9 further illustrate the differences between northern and southern Ontario. They show pairs of communities with similar populations in northern and southern locations.

Figure 2.3
NORTHERN ONTARIO
RETAIL GASOLINE PRICES



SOURCE: ONTARIO GOVERNMENT SURVEYS

Figure 2.4
COMPARATIVE POPULATION CENTRES
RETAIL GASOLINE PRICES

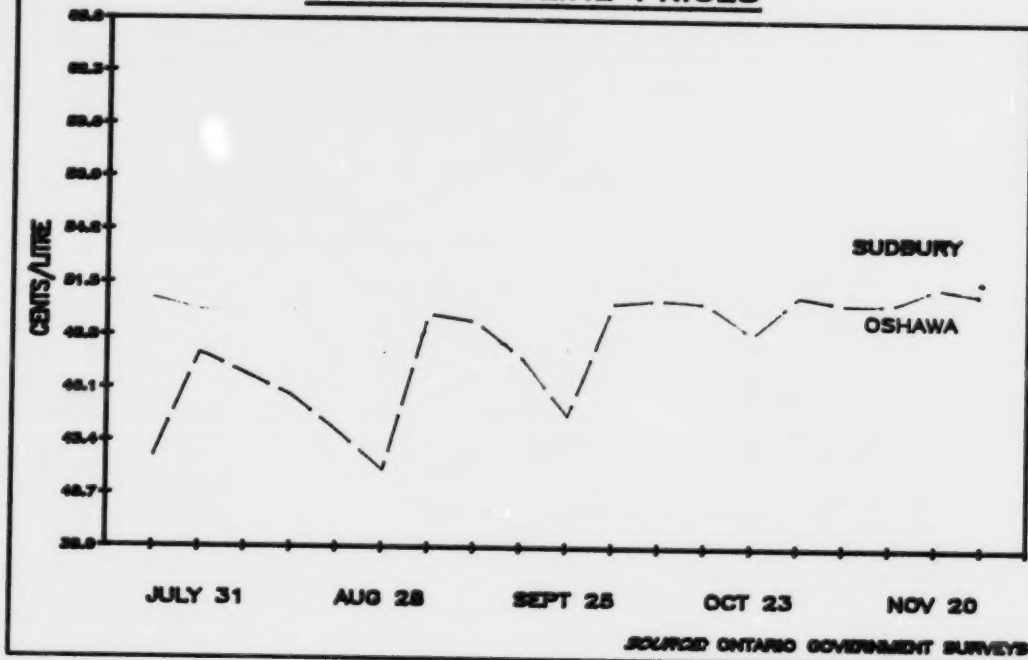


Figure 2.5
COMPARATIVE POPULATION CENTRES
RETAIL GASOLINE PRICES

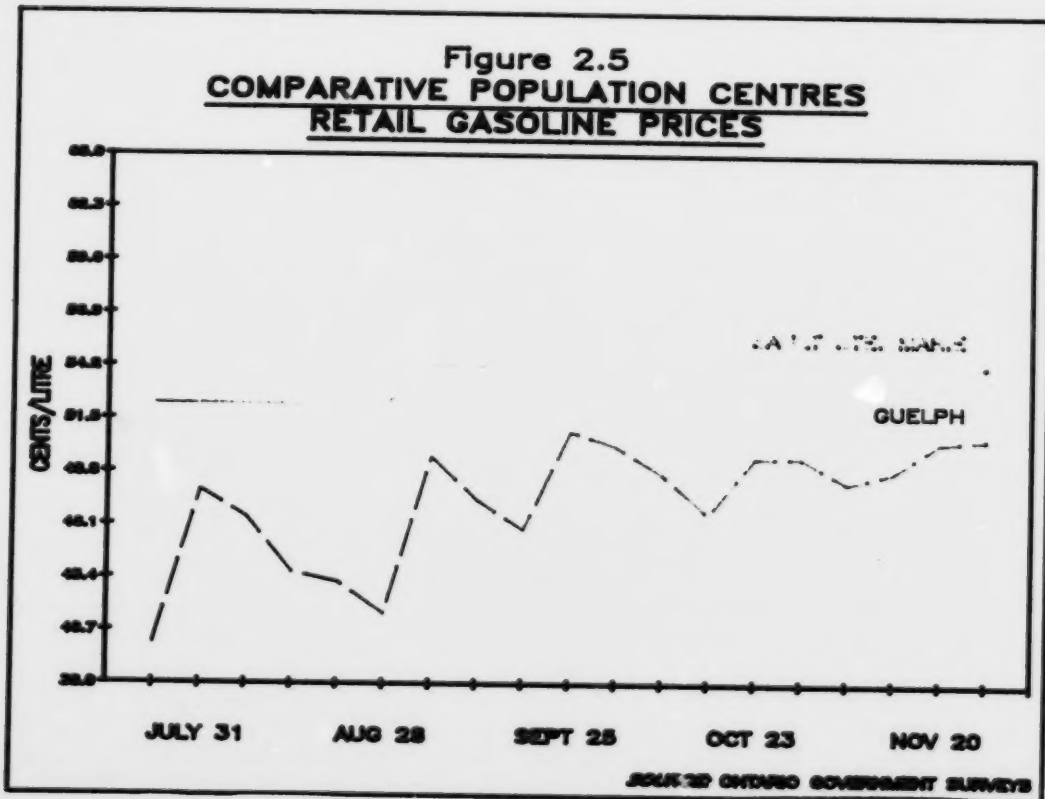


Figure 2.6
**COMPARATIVE POPULATION CENTRES
RETAIL GASOLINE PRICES**

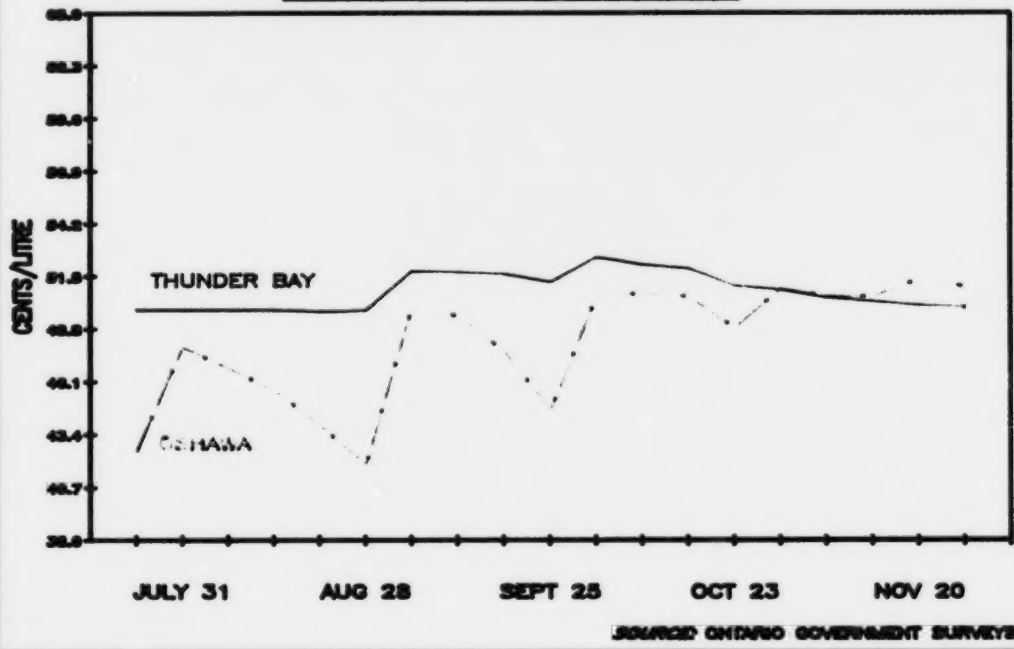


Figure 2.7
**COMPARATIVE POPULATION CENTRES
RETAIL GASOLINE PRICES**

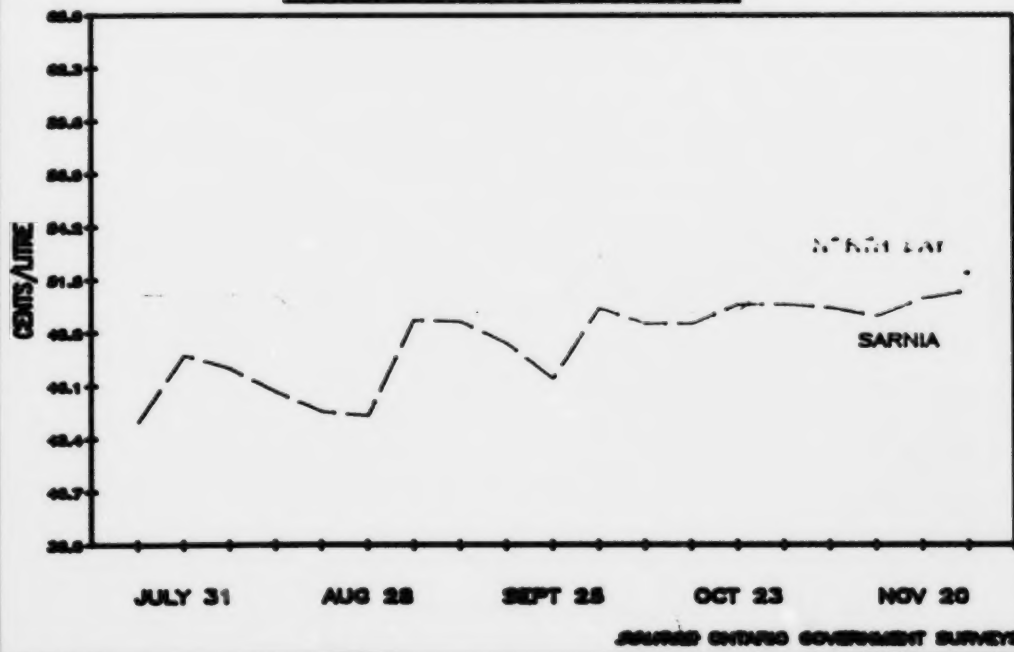


Figure 2.8
COMPARATIVE POPULATION CENTRES
RETAIL GASOLINE PRICES

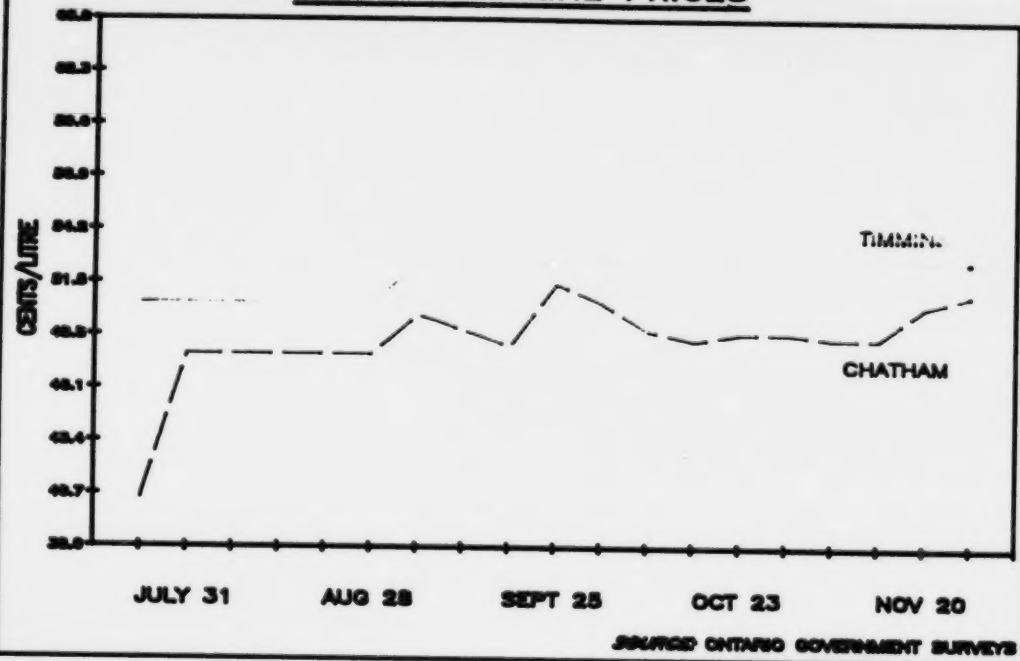
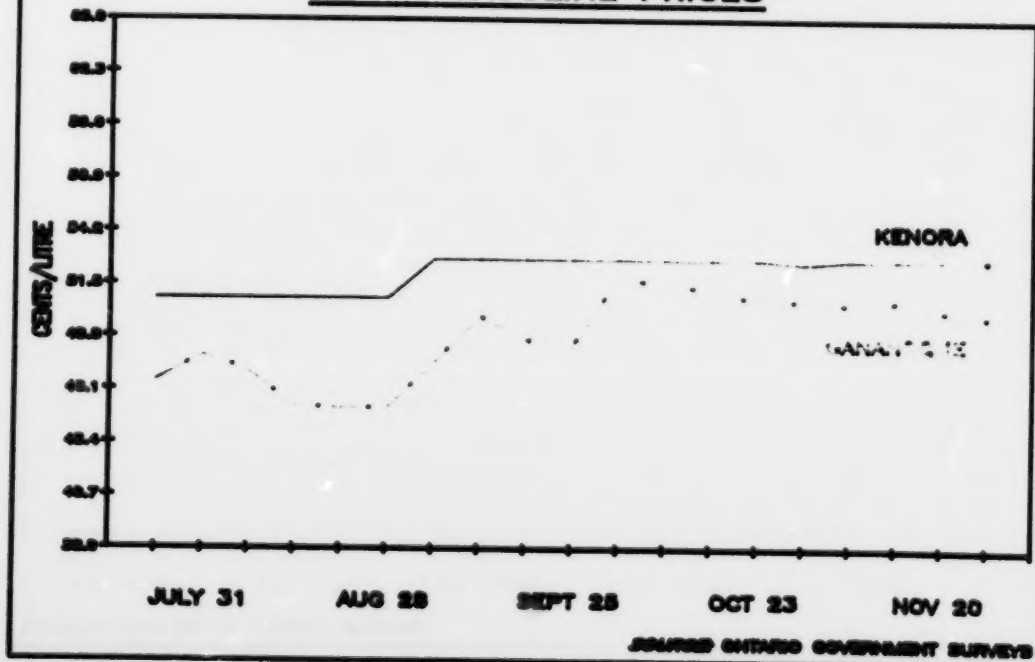


Figure 2.9
COMPARATIVE POPULATION CENTRES
RETAIL GASOLINE PRICES



The Impact of Higher Prices on Northern Motorists

The average personal use passenger vehicle in Canada was driven a distance of 17,130 kilometres in 1984 and consumed 2310 litres of gasoline according to Statistics Canada. Seventy five per cent of such vehicles drove less than 20,831 kilometres.

An upper limit of gasoline consumption by northern residents can be estimated by assuming that the average northerner drives a distance of 21,000 kilometres (i.e. at the seventy fifth percentile), and that the fuel efficiency of his car is ten per cent lower than the national average. On this basis average northern fuel consumption would be 3090 litres per year.

Over the period of the survey, prices in northern Ontario averaged 4.2 cents per litre more than in southern Ontario, although this difference was much smaller toward the end of the survey.

At a difference of 4.2 cents, the average motorist in northern Ontario pays an extra \$130 a year as a result of higher gasoline prices.

Obviously, for a high mileage driver in a high-priced remote community, this average will considerably understate the extra costs incurred. However, for the majority of northern residents who live in the major urban centres, actual additional costs will be less than this average.

CHAPTER 3: THE COSTS BEHIND THE PRICES

HIGHLIGHTS

- . Distribution costs to large stations in northern cities are about 1.5 cents per litre higher than costs to similar stations in Toronto.
- . Distribution costs to smaller urban stations are typically higher by an additional 2 cents per litre.
- . Distribution costs in more remote northern communities sometimes exceed Toronto area distribution costs by as much as 7 cents a litre.
- . It is more expensive to deliver gasoline to smaller stations because their smaller tanks preclude delivery of a full truck-load.

PROCEEDS FROM THE SALE OF GASOLINE

When a litre of gasoline is sold for 50 cents per litre, the revenue is divided approximately as follows:

	<u>Cents per Litre</u>
Crude oil producer	17.3
Taxes on crude oil	8.0
Transportation of crude oil	1.1
Gasoline Taxes (Federal & Ontario)	14.7
Dealer	3.0
Refiner	7.9
TOTAL (Retail Pump Price)	<u>50.0</u>

During the period of the study, most dealers were guaranteed a fixed margin by their suppliers. Under this system, any change in the retail price is reflected in the refiner's share, as shown in Figures 3.1 and 3.2.

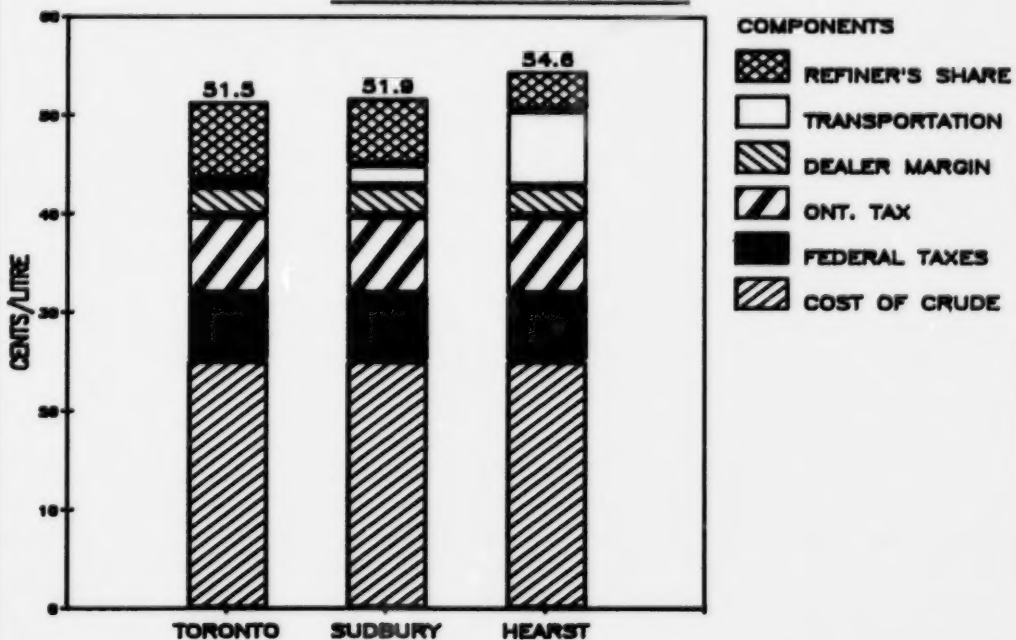
The revenue received by the refiner is used to pay the costs of refining, marketing and distributing gasoline throughout the province. Refining costs are the same, regardless of where the product is sold. They therefore have no direct impact on differences in costs or prices between northern and southern Ontario. A description of these costs is given in Appendix C.

Figure 3.1
REFINERY MARKUPS



PRICES AS OF 08/28/85

Figure 3.2
REFINERY MARKUPS



PRICES AS OF 11/19/85

Under Imperial's new rack pricing system, changes in retail price are reflected in the dealer's share. However, wholesale costs will be adjusted to reflect market conditions, ensuring that refiners' margins will also be affected by price changes.

Marketing

The cost of marketing gasoline is centrally allocated. The information available suggests that the additional costs of northern Ontario marketing are not recovered in the higher retail gasoline prices in northern Ontario.

Distribution Costs

All Ontario refineries are located in the south. Gasoline is distributed to service stations in a number of ways as depicted in figure 3.3. Most stations in southern Ontario are relatively close to terminals supplied by pipeline. Northern Ontario is served by marine terminals in Thunder Bay, Sault Ste. Marie and Parry Sound as well as by truck and rail from southern terminals. The distribution system is described in more detail in Appendix D.

All the major oil companies maintain bulk plants throughout the province to deliver petroleum products to areas where direct deliveries are not feasible. These bulk plants are operated by agents who are paid a commission for selling and distributing branded products.

Most of these agencies were established primarily to serve the heating oil market. The contracts between the agent and the oil company are usually geared to heating oil sales. Gasoline deliveries represent additional business to the agent. He charges the oil company a competitive price for delivering gasoline to service stations in his area. In this case, competitive prices are those which match the prices offered by independent contract carriers.

In addition to the amount paid to the agent, the oil company incurs other expenses such as inventory costs. A part of the maintenance cost of the bulk plant would also be charged to gasoline sales.

Confidential data provided by the oil companies on their northern activities reveal considerable variation in distribution costs, depending on the capital investment that individual companies have made in specific locations. A company with the

cheapest distribution costs in one area often incurs higher-than-average costs in another. Generally, however, the costs of the most efficient distribution network in any area influence gasoline prices there.

Table 3.1, based on data from several companies, shows gasoline delivery costs for particular service stations in selected communities. These data suggest three conclusions:

- There are underlying cost differences between communities reflecting their geographic accessibility within the distribution network. On average, gasoline delivery costs to large stations in urban areas of northern Ontario exceed costs to stations in the Toronto area by about 1.5 cents per litre. For smaller stations in locations more remote from the large terminals, the cost of gasoline delivery is as much as seven cents more than in Toronto.
- Within each community costs vary for non-geographic reasons. In the Sudbury area, for example, agent deliveries are more expensive than direct deliveries from southern terminals. But they serve stations whose tank storage is too small to make direct delivery feasible. Thus local delivery costs are affected by the size of the drop.
- The costs of storage in terminals and bulk plants reflect not only the total operating costs of the facilities but also the volumes of gasoline over which these costs are distributed.

A concern expressed by northern residents is that price differentials between north and south are believed to be greater than could be accounted for by differences in distribution costs. Information provided by the refiners indicates just the opposite, that additional revenues resulting from price differences throughout northern Ontario are insufficient to cover the difference in distribution costs. Several refiners have stated that they realize less from their northern stations than they do from those in the south, indicating that, at the wholesale level, additional distribution costs are not recovered by the difference in prices. They argue that this reduction in profit, common to all of the national brands, results from over representation in the north for the purpose of being able to offer a coast-to-coast market presence.

The proliferation of stations above and beyond what could be supported by the market has led to inefficient retail operations, distributing the costs over a low volume of gasoline. This system requires higher margins to support it, resulting in higher retail prices.

COST TO SERVICE STATIONS IN:

CENTS/LITRE

TABLE 3.1

LINK

	<u>Toronto</u>	<u>North Bay</u>	<u>Sudbury</u>	<u>Sault Ste. Marie</u>	<u>Thunder Bay</u>	<u>Timmins</u>	<u>Hearst</u>	<u>Geraldton</u>
Refinery to Toronto by pipeline (1)	0.2-0.5	0.2-0.5	0.2-0.5	N/A	N/A	0.2-0.5	0.2-0.5	N/A
Refinery to Marine Terminal (1)	N/A	N/A	N/A	2.0	2.0	N/A	N/A	2.0
Winnipeg to Thunder Bay (Rail)	N/A	N/A	N/A	N/A	3.5	N/A	N/A	3.5
Toronto to Bulk station(2)	N/A	2.0	2.0	N/A	N/A	2.0-4.0	3.0-5.5	N/A
Marine Terminal To Bulk Station(2)	N/A	N/A	N/A	0.5	0.5	N/A	N/A	3.0
Local Delivery	0.5	0.5	0.5	0.5	0.5	0.5-2.0	0.5-2.0	1.0
Direct Delivery Ex Toronto	0.5	2.0	2.0	N/A	N/A	N/A	N/A	N/A
Total Cost	0.7-1.0	2.2-3.0	2.2-3.0	2.5-3.0	2.5-4.5	2.7-6.5	3.7-8.0	6.0-7.5

Notes:

1. Including terminal throughput charges
2. Including bulk plant throughput charges
3. N/A: Not Applicable

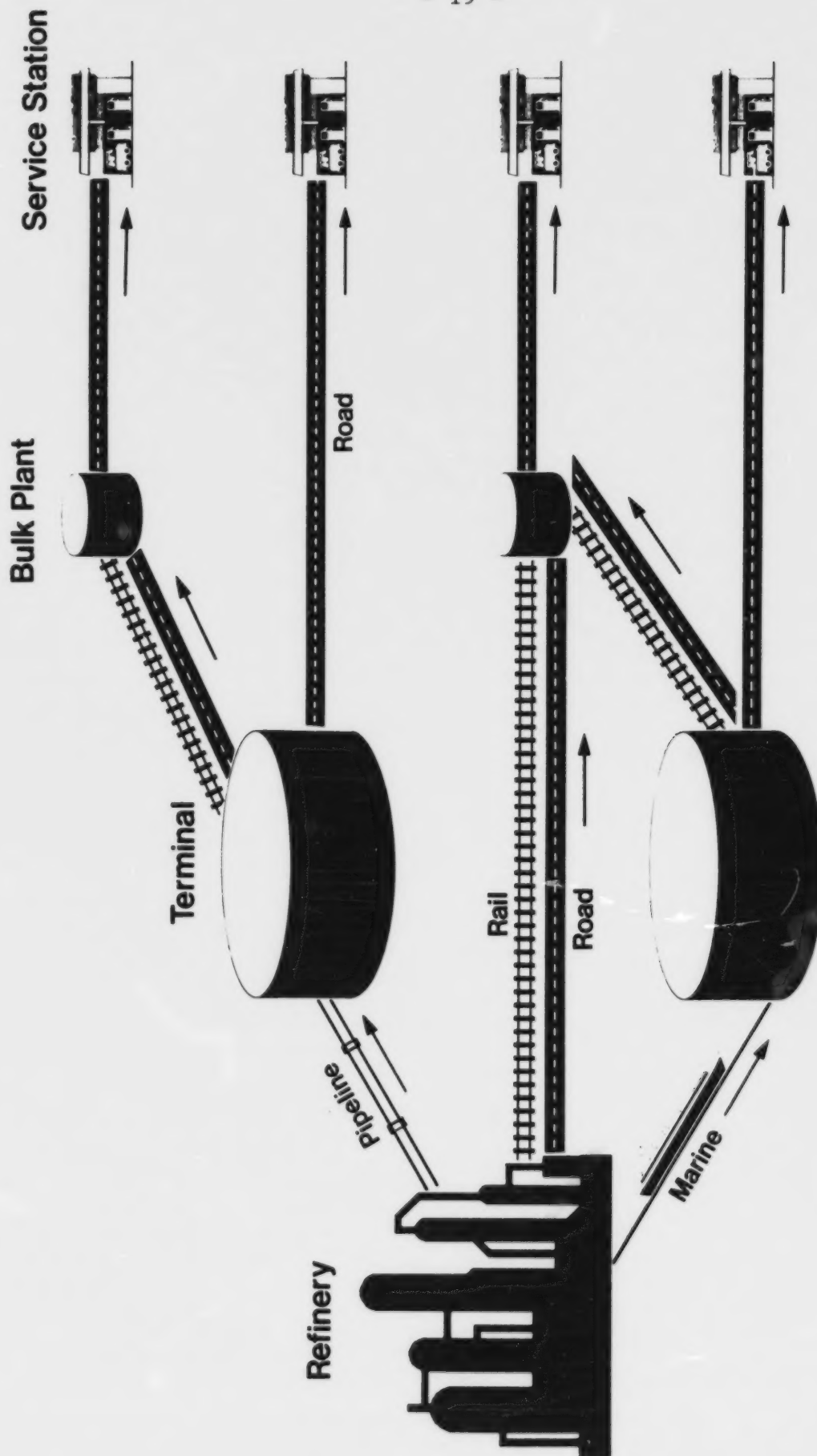


Figure 3.3
Gasoline Distribution Network In Ontario

CHAPTER 4: THE IMPACT OF REFINERS ON PRICE DIFFERENCES

HIGHLIGHTS

- . Ontario has seven refineries operated by six companies, all located in southern Ontario.
- . In general, the most aggressive refiners are more heavily represented in the south.
- . Polysar does not operate a retail chain but sells exclusively to independents, mainly in the south.
- . All the major refiners except Gulf operate "fighting" brands to compete directly with independents. Most of these second brand outlets are located in the high volume markets of the south.

THE REFINERS

One of the major differences between the northern and southern gasoline markets results from the different attitudes toward pricing of the individual refiners and the degree to which each is represented in different parts of the province.

Some refiners, as a matter of policy, are more aggressive on price than others. All refiners are intent on maintaining or increasing their volume of sales in order to keep their refineries operating at efficient levels. However, the importance of this factor relative to the need to maintain profit margins varies from company to company. Generally, refiners who seek to increase sales through aggressive pricing do so in large markets where any increase in market share will have a significant impact on volumes. As a result, the more aggressive pricers among the refiners have invested more heavily in the larger markets of southern Ontario than they have in the north.

By contrast, refiners whose strategy is to maintain profit margins on existing business are more heavily represented in northern Ontario. These include most of the national brands, who followed strategies of maintaining a presence from coast-to-coast, resulting in a large number of outlets in northern Ontario relative to the population.

While all refiners in Ontario sell gasoline to independent retailers, all, with the exception of

Polysar also maintain their own chains of branded outlets. With the additional exception of Gulf, all maintain outlets bearing a second or "fighting" brand which sells gasoline at prices designed to compete directly with the independents. Most of these second-brand outlets are located in the high-volume markets of southern Ontario.

Polysar does not maintain a retail distribution network. Gasoline is sold entirely through jobbers on a non-exclusive basis. Polysar has a relatively small list of clients most of whom operate almost exclusively in southern Ontario. Polysar is therefore not a factor in setting prices in northern Ontario. However, its presence in the south contributes to the differences between the two markets.

Polysar signs contracts with jobbers for the sale of gasoline for a fixed period of time. During intense price wars, when other refiners are supporting their own retail networks, Polysar is forced to offer price support to these independent jobbers in order to maintain its volume. This support allows the jobbers to compete with the major brands at lower price levels than would otherwise be the case.

WHOLESALE GASOLINE PRICING

Wholesale Pricing Systems

Dealer Tank Wagon Prices are official prices established by refiners for various classes of trade. Although they are adjusted to reflect market conditions, they are fundamentally cost related and proved to be unable to adapt to the intense competition of recent years. Discounts are negotiated on an individual basis.

Guaranteed Margins set wholesale prices in relation to the retail price. Dealers are guaranteed a set margin on sales of gasoline, regardless of the market price. The wholesale price is effectively the retail price less the guaranteed margin.

Rack Pricing, as recently introduced, establishes zone prices for various classes of trade. Volume discounts are available according to a fixed scale. Prices are adjusted to reflect market conditions. (See Appendix H for details).

Equalized Rack Pricing is advocated by various interest groups but not practiced. Gasoline would be available at the refinery to all customers at the same price regardless of volume.

During the period of the study, all Ontario refiners had similar systems by which gasoline was priced at wholesale. These systems set wholesale prices under "normal" market conditions, but allow retail prices to dictate the wholesale level under conditions of "depressed" prices. In practice, the so-called "depressed" prices are in fact the norm, and for most stations, wholesale prices are set in relation to prevailing retail levels. While this is true throughout Ontario, the incidence of full wholesale pricing is more common in the north.

The "official" or wholesale pricing systems are generally referred to as Dealer Tank Wagon Prices. Dealer Tank Wagon prices are essentially cost-oriented. The price is intended to recover costs and yield return on investment.

Though the official price is fundamentally cost-related, no refinery can afford to set a price that is substantially out of line with those of the competition. The result is that the official price charged in a zone by a refinery is sometimes inconsistent with its costs for that zone. Several refineries have stated that the total additional costs of deliveries to northern Ontario are not recovered in their official prices.

Price Support Mechanisms

In practice, few Ontario branded dealers pay the official wholesale price. Severe competition has generally undermined the ability of a dealer selling a refinery brand to earn a sufficient margin over the official price to cover expenses. Thus the refiners have been forced to offer price support to protect the economic viability of their dealer networks. Although at least 95 per cent of all refiner branded outlets in Ontario, including those in northern Ontario, are currently on some form of price support, the exceptions are more common in northern Ontario.

Through a variety of mechanisms, the refiners ensure that, regardless of retail prices, the dealer is guaranteed a set margin on every litre sold. The margin is currently about 2.8 to 3.0 cents a litre. Only rarely is the dealer allowed a higher margin when prices rise. A dealer receiving price support is thus protected from, and tends to become indifferent to the risks of falling gasoline retail prices.

Price support changes the relationship between refiners and their branded dealers. A dealer requesting price support becomes, in effect, the refiner's agent. The refiner has acquired an interest in retail price levels, and the dealer has sacrificed the right to establish his own prices. In theory retail prices are set by the refiner. In practice, they are dictated by the marketplace, because no refiner can afford to charge more than the current market price.

Dealers usually request price support when price levels drop to the point where the spread between the prevailing retail price and the Dealer Tank Wagon price is less than the margin that the refiner will guarantee. This implies that in high priced areas (those where Dealer Tank Wagon wholesale prices are charged), both the wholesale price and the retail margin are higher than in lower priced areas where price support is in effect.

Rack Pricing

Esso has recently introduced a system they call rack pricing which is designed to replace the current system of guaranteed margins. This system was not in general use during the period of the study and therefore did not affect price differences at that time. It is discussed in more detail in Appendix H.

PRINCIPAL BRANDS OF GASOLINE IN ONTARIO

<u>Brand of Name Outlets*</u>	<u>Supplier</u>	<u>Status</u>	<u>Number</u>
Beaver	Shell	Fighting Brand	70
Canadian Tire	Texaco	Independent	83
D-X	Various	Independent	79
Mr. Gas	Various	Independent	28
Husky	Exchange Agreements	Regional Refiner	44
Esso	Self-supplied(2)	Integrated Major	883(1)
Gain	Esso	Fighting Brand	(1)
Gulf	Petro-Canada	Bought Out	501
Petro-Canada	Self-supplied	Integrated Major	1005(2)
Pronto	Sunoco	Fighting Brand	40
Shell	Self-supplied	Integrated Major	1141
Rebel	Petro-Canada	Fighting Brand	(2)
Regent	Texaco	Fighting Brand	(3)
Sunoco	Self-supplied	Regional Refiner	487
Texaco	Self-supplied	Integrated Major	813(3)
Top-Value	Various	Independent	88
Ultramar	Esso by Exchange	Regional Refiner	206(4)
V-Plus	Sunoco	Management Contract	29
X-L	Ultramar	Fighting Brand	31

(1) Gain stations included in Esso figures.

(2) Rebel stations included in Petro-Canada figures.

(3) Regent stations included in Texaco figures.

(4) Includes stations displaying other brand names, including XL.

*Source: OilWeek Magazine, June 3, 1985

CHAPTER 5: DIFFERENCES IN THE RETAIL MARKET
DEVELOPMENT OF THE GASOLINE MARKETING NETWORK

HIGHLIGHTS

- . The gasoline retail marketing network has adapted more quickly to changing conditions in the south than it has in the north.
- . This has resulted in a more efficient network in the south.
- . Dealers in the south tend to compete on price while those in the north rely more on service.

Historical Growth

The Ontario retail gasoline network developed largely in the period following the second world war. Refiners embarked on ambitious programs of building service stations to capture a share of the rapidly expanding market. When the market first peaked and then started to contract in the early eighties, the battle for market share became more serious. At the same time the advent of longer warranties, longer-life radial tires, and longer periods between scheduled maintenance work was depriving the service station owners of a large part of their non-gasoline related income.

Gasoline marketers responded by introducing self-service stations and gas bars and by cross-merchandising with other businesses such as car washes and convenience stores. These new facilities competed much more on price than had the traditional, full-service stations.

This process of change is continuing and will eventually result in a smaller number of stations, each selling a higher volume of gasoline. These changes occurred first in high-volume areas, where loss of market share would have the most serious effect on an individual refiner's gasoline sales.

As a result, stations which compete primarily on price are more common in southern Ontario than they are in the north. Where they do occur in the north, they tend to be in urban areas, resulting in price differences between cities and rural areas.

The development of the retail network and the resulting differences between north and south are given in more detail in Appendix E.

Types of Gasoline Retailers

Company Operated Stations owned by the refiners and operated by employees or by agents appointed by the refiner.

Branded Lessee Dealers who lease service station facilities from a refiner, display that refiner's brand and sign an exclusive supply contract.

Branded Independents who own their own facilities, but in other respects operate like branded lessee dealers.

Private Brand Independents which display their own brands. They may sign exclusive contracts with a refiner or buy wherever gasoline is the cheapest.

Private Retail Chains which sign exclusive supply contracts with a refiner but display their own brands.

Jobber outlets supplied by distributors who buy gasoline from a variety of refiners, usually at a major terminal, and distribute it to their own chains of retail outlets.

Fighting Brand Outlets which are usually owned and frequently operated by refiners and which display a second brand priced to compete directly with independents.

Retail Outlets

There are seven major types of retail gasoline stations in Ontario. They are not evenly distributed. In general, the most aggressive retailers in terms of pricing are more common in the south.

Refiner Operated Stations

Most refiners operate some stations directly, using company employees or agents hired for the purpose. Generally such outlets are in high volume locations where the refiners see it as being to their advantage to earn the retail margin as well as their usual wholesale mark-up.

Because they are concentrated in high-volume markets, these stations are more common in the south than they are in the north.

Independent dealers frequently accuse the refiners of discriminating against them by setting artificially low transfer prices for company operated stations. However, during the course of the study, no evidence was found of predatory or exceptionally aggressive pricing on the part of company operated stations.

Under the system of guaranteed retail margins which was prevalent through the study, it would have been counter-productive on the part of the refiners to engage in predatory pricing through these outlets, because the system allowed independent branded dealers to match any price without losing margin. Under the new system of rack pricing, this will no longer be true.

Branded Lessee Dealers

Lessee dealers form the largest of the seven groups. They are particularly predominant in southern Ontario where the refiners have invested heavily in the major market areas.

As a group, lessee dealers tend to be relatively aggressive for two reasons.

1. The system of guaranteed margins effectively allows them to engage in price war activity without incurring any of the risks associated with falling prices.
2. Since their rents are usually calculated on the basis of the business opportunity at the particular location rather than on a normal return on the refiner's investment, their expenses are low relative to dealers who must bear the full cost of financing their facilities. This cost advantage allows them to compete more aggressively on price.

All the refiners who operate retail chains identified this behaviour on the part of individual dealers as being one important cause of price wars.

This behaviour is more common in larger markets because the closer spacing of stations causes the impact of any change in prices to be felt more widely.

Branded Independents

Retailers who own their own premises but offer a major brand of gasoline are usually supplied under the same conditions as the refiner's leased stations. The only difference is that the operator does not pay lease costs to the refiner.

During conditions of extreme price competition, these dealers receive the same guaranteed margins as do the dealers operating company-owned stations. However, since they often bear the full cost of financing their facilities, they tend to be less aggressive on price.

Among branded stations dealer owners are more common in northern Ontario than in the south.

Private Brand Independents

There are many unbranded, independent operators in the market, particularly in northern Ontario. Such dealers buy gasoline wherever it is cheapest, but rarely buy enough to qualify for the discounts available to larger operators. Their wholesale costs are therefore quite high. To stay in business, they must pass through these extra costs to their retail customers.

Private Retail Chains

Several chains of outlets exist with exclusive supply contracts. Ordinarily, the outlets are operated by the chain itself or by the supplying refiner under contract. They receive price support from their suppliers and generally offer prices slightly below those offered by competing major brands. However, they are not particularly aggressive pricers, for two reasons:

1. Since they are usually operated corporately, there is no tendency for individual dealers to attempt to raise volumes by cutting margins, and
2. They are not faced with the same problems as refiners who must keep their refinery utilization levels high.

These outlets are normally located in urban areas where the market is more sensitive to price. There is no significant difference between north and south with respect to their numbers or modes of operation.

Jobbers

Several retail chains sign supply contracts with a number of suppliers. Many operate their own distribution systems, picking up gasoline at refiners' terminals and delivering it to their dealers either directly or through bulk plants.

Jobbers generally sign contracts with refiners which provide for discounts at higher volumes. Although they may sign contracts with several refiners, jobbers tend to purchase a majority of gasoline from one supplier in order to raise their volumes to the point where the maximum discount is available.

Jobbers tend to be extremely aggressive on price, because any increase in volume is reflected in their purchase costs by way of deeper discounts.

Usually jobbers do not receive price support or guaranteed margins from their suppliers. If the prevailing retail price falls, their margins are reduced. Polysar, however, does offer a limited degree of price support to its major jobber customers.

Jobbers concentrate in price-sensitive markets where discounters can offset low margins with high volumes. Only recently have they started to move into urban areas in northern Ontario.

DEALER ECONOMICS

HIGHLIGHTS

- . Gasoline is more important to the southern dealer because, on average, volumes are higher in the south.
- . The economics of gasoline stations are very sensitive to volumes.
- . Most stations sell other goods and services in addition to gasoline.
- . These other goods and services typically earn higher margins than do sales of gasoline.
- . The relative importance of gasoline sales to the dealer determines his attitude toward pricing.

There are approximately 6,000 retail gasoline outlets in Ontario. Most of them also sell a variety of other goods and services which frequently contribute more to the overall business than do sales of gasoline. The relative importance of gasoline sales to the business enterprise is a key determinant of the attitude of the retailer to gasoline and has a major impact on the way gasoline is priced.

The effects of volumes on a dealer are given in more detail in Appendix F. They can be summarized as follows: If a dealer sells large volumes of gasoline, then gasoline sales are either his primary business or they attract customers to other enterprises. If the dealer's volume is small, then gasoline sales are merely one component of a diversified business. High volume dealers tend to be more aggressive on price, since the average southern station sells approximately 75% more gasoline than the average northern station, this factor alone has a significant impact on price differentials.

In southern Ontario, the average full-serve station sells enough gasoline to maintain a viable complementary business. Such stations are normally aggressive on price in order to attract more business. In northern Ontario, lower volumes weaken

the link between gasoline and other sales, and the dealers are less aggressive.

The economics of a self-serve station are quite different. Variable costs are lower because there is less labour, but capital costs are usually higher. Such stations normally do not have significant sales of products other than gasoline. They are located in high-traffic areas, because high volumes are required to justify the capital costs.

Most self-serve stations try to maintain a fixed price spread with respect to competing full-serve stations. This spread is currently around 0.4 cents per litre. Since self-serve stations are more common in the south, this also contributes to regional price differentials.

CHAPTER 6: MARKET FACTORS AFFECTING
PRICE DIFFERENCES

HIGHLIGHTS

- . The most important factor is the overall size of the market.
- . Greater population density makes the southern Ontario market relatively homogeneous.
- . In the north, greater distances divide the market into independent sub-markets.
- . Larger markets attract a greater choice of brands including aggressive independents, a wider mix of services, and more price competition.
- . Smaller markets tend to compete on the quality of service as opposed to price.
- . Traffic flows are greater in the south and there are more customers per outlet.
- . The oil companies have invested more in the south and may act more aggressively there to protect their investments.
- . Distribution costs are higher in the north due to greater distances from the refineries.
- . Retailing costs are higher in the north due to lower volumes.
- . There exists in northern Ontario a large segment of the market that is relatively insensitive to price.

Market Factors

The preceding chapters have dealt with the supply of gasoline and described how the various wholesalers and retailers behave differently in northern and southern Ontario.

Partly resulting from these differences and partly causing them, the market itself is different from north to south.

Size of Market

The most significant single market factor affecting price differences is market size. Nearly all the factors which contribute to price differences between northern and southern Ontario are related to the size of the market.

The market size factor affects Ontario gasoline prices in two ways. First, taken as a whole, the southern Ontario market is much larger than that in the north. This fact alone tends to make southern prices lower. Secondly, the southern Ontario market is more of a unified whole, whereas northern Ontario consists of a number of smaller, comparatively independent markets. In southern Ontario small communities are rarely far from major urban centres or from tourist routes. They thus tend to reflect the prices prevailing in the adjacent large markets, so that substantial price differences between communities do not occur frequently.

Within northern Ontario by contrast, the price differences between large and small markets are much more noticeable. For example, the Thunder Bay and Sudbury markets generally exhibit fairly competitive pricing and occasionally experience mild price wars unlike smaller communities such as Chapleau and Hornepayne where much higher prices are common.

Exceptions to this general rule can occur because of other factors. In northern Ontario only four markets appear to be large enough to develop the increased competition normally associated with larger markets: Thunder Bay, Sault Ste. Marie, Sudbury, and North Bay. The Sault Ste. Marie market, however, behaves differently from the others because price-conscious customers tend to cross the border to buy gasoline in Michigan where prices are lower. In Sault Ste. Marie, only those customers for whom convenience or service is more important than price buy gasoline in Ontario. By contrast, several communities which are not large enough to generate active price competition on the basis of their size, nevertheless do have competitive markets as a result of other factors.

Traffic Flow

High traffic flows can push prices either way. In some localities, several dealers will struggle for marketshare. The total gasoline volume is insufficient to make it worthwhile to compete on price. Instead, dealers rely on repairs or special service to attract customers and charge relatively high prices for gasoline.

However, such locations are also frequent targets of the new wave of gasoline retailers who offer little or no service and compete on price. Such operators may build a low-cost gas bar requiring minimum staff on such a street, offer lower prices, and force the other dealers either to match prices or relinquish their gasoline market share. Such rationalizations have occurred more frequently in southern Ontario, where higher traffic flows have made such opportunities more common. But similar low-cost operations are moving into the larger market areas in the north.

Customers per Outlet

This factor is related to traffic past an outlet but also assumes greater significance in smaller, independent markets and relatively isolated communities where the service stations rely almost exclusively on local traffic. A prime example is Red Lake, which has six service stations serving a population of 2,165. The vehicle population is difficult to determine since it includes substantial numbers of boats, snowmobiles, and all-terrain vehicles as well as conventional automobiles and trucks. However, the ratio of vehicles to outlets is very low by any yardstick. Dealers survive because they offer a variety of services ranging from heating oil distribution to marina facilities. Gasoline volumes are low and sales would not be worthwhile in the absence of substantial margins. Prices are, therefore, consistently high.

By contrast, the average station in Toronto services 2,845 people, a figure more than 30 per cent greater than the entire population of Red Lake with its six stations.

Nature of Traffic

Whether the traffic past a station is local or long-distance can be more important than the total volume of the traffic. On an arterial road heavily used by commuters, prices are often relatively low. Motorists are unlikely to stop for repairs other than in emergencies. Dealers must therefore earn their living from gasoline sales. Price is their most effective competitive tool. Similarly, stations built along heavily travelled through highways tend to have competitive prices.

An exception to this generalization occurs along restricted access highways in southern Ontario. The rights to sell gasoline at service centres along these routes were determined through a tendering process. Recognizing the prestige value of having high-profile outlets along such heavily travelled routes, the refiners bid high prices for these rights. Overhead costs are, therefore, very high. At the same time, a large proportion of the traffic flowing past these stations is involved in long trips and requires refuelling somewhere along the route. A significant proportion of this traffic is not very sensitive to price. As a result, prices at such outlets tend to be relatively high.

Stations in towns off the major highways tend to offer full service and charge higher prices. A prime example is Highway 11 from North Bay to Cochrane. Prices are even and relatively low along the highway. In Cochrane itself, however, prices during the survey were 4.3 cents per litre higher.

Sometimes dealers catering to the two kinds of traffic are found in close proximity. Mattice, for example, has two stations. One is a full service station with two bays. The other is primarily a gas bar offering only minor repairs. The station offering full service usually charges a full 6 cents per litre premium over its competitor.

In the south the distinction between commuters and local traffic exists but tends to be obscured by other factors. Because on average the cities are larger, the average southern commuter travels farther to work than his northern counterpart. He can choose to purchase gasoline near home, en route, or at work. This greater choice makes the southern motoring public more price sensitive.

The wider range of alternatives available to southern Ontario motorists tends to increase competition between groups of stations as well as that between individual stations within a given group. Thus dealers in suburban areas are also competing with dealers along arterial roads and dealers in the downtown core. A similar phenomenon occurs with highway traffic, particularly along major highways leading from major urban centres to cottage areas. For example, competition between Toronto dealers and rural highway dealers extends as far north as Burk's Falls and Powassan, 300 kilometres from the city, and often leads to price wars along the routes.

Tourist traffic also affects prices differently in the north and the south. In southern Ontario the ratio of tourists to local traffic is lower, so that the tourist effect is less. Also, a greater proportion of the tourist traffic crosses the border frequently in the south. These travellers are less likely to purchase gasoline in Ontario because American prices are normally lower.

In northern Ontario a greater proportion of tourist traffic involves lengthy vacation trips that require gasoline to be purchased in Ontario. Often such tourists are more concerned with buying a brand that they recognize at stations that will accept their credit cards, than they are with the price of the product.

Refinery Costs

The cost for the refinery of making the gasoline is a very significant factor in the market. The economics of refining, like those of dealers, are very sensitive to volumes. Refineries are capital intensive, and the fixed costs are high. They will, therefore, go to great lengths to maintain their utilization rates at high levels. For this reason, at least in the short run, refiners tend to keep supplying product even if costs go up and prices do not.

The problem of maintaining refinery utilization rates is also affected by market size. A refiner who captures a larger share of a small market will do little to improve his operating efficiency. However, even a small gain in share in a large market can have a significant impact. Refiners, therefore, tend to be more aggressive pricers in large markets such as southern Ontario and more sensitive to price moves by others.

When suppliers are faced by increased costs such as the recent increase in the federal excise tax, they usually try to pass on the full increase to the consumer in the form of higher retail prices. The market resists this move and a flurry of price changes ensues which eventually results in prices which, while slightly higher than they were previously, do not recover all the additional costs. The gasoline market is better able to resist such increases in southern Ontario than in the north.

In southern areas, which often experience gasoline price wars, motorists are very responsive to prices. When prices are low, motorists fill up their tanks because they know that a price restoration will soon occur. When prices are restored, they delay fuelling and often purchase small volumes of gasoline in the expectation that prices will fall once again. In the short run, this lowers the volume of sales, raises costs, and prevents the refiners from passing on the full measure of any price increases. A description of how this occurs is included in Appendix G.

In northern Ontario, the market shows less price activity and is thus less able to discipline prices.

Choice of Brands

The greater the choice of brands being offered in the marketplace, the greater will be the level of competition. The variety is a sign of the extent to which competition involves refineries as well as individual dealers. Several of the major gasoline marketers that have a substantial impact in southern Ontario are either completely absent from, or very thinly represented in the north. For example, Petro Canada which, before its recent purchase of Gulf stations, already had the second largest number of branded outlets in Ontario, had only 25 stations in northern Ontario, eight of them in Sudbury and three of those at the same intersection! Ultramar, a company which operates a refinery in Quebec and markets products in Ontario via exchange agreements with other refiners, also concentrates its efforts in southern Ontario, as do most of the major jobber chains such as Suny's and Pioneer.

Even though some brands market almost exclusively in the north, the range of competitive brands available in the north is smaller than in the south. This factor was identified by several refiners as an important contributor to price differences. However, the influence of other factors was such that it was not possible to verify this from available data.

Availability of Independent Brands

In addition to the absolute number of different brands offered, the make-up of that number can be significant. Prices tend to be lower when independent brands are available. For example, areas served by jobbers tend to offer cheaper prices than areas served exclusively by branded outlets.

The struggle between refinery brands and jobbers is a frequent cause of price wars and thus lower prices. A recognized major brand can usually command a premium in the marketplace. To earn a share of the market, a jobber outlet must charge a somewhat lower price. If he is too successful in capturing market share, the branded dealers will react by lowering their prices. Sometimes an uneasy truce results in the discount offered by jobber outlets remaining stable over extended periods. Sometimes, and often in certain areas, the struggle between the two kinds of dealer is constant. This behaviour occurs much more frequently in southern Ontario where jobber outlets are more common.

Individual non-branded dealers often have exclusive supply contracts with one or another of the refiners and tend to be less aggressive on price. Such stations pay less than branded dealers for their gasoline because they are not charged for advertising and other expenses involved in maintaining the brand. In other respects they are treated much like branded dealers and sometimes receive price support from their suppliers in the event of price wars. These dealers may be individual stations or they may be chains of outlets such as Sears, V-Plus, and Canadian Tire. These stations, though independently owned, are closely tied to the refiners by their supply agreements.

While all kinds of dealers are found in both northern and southern Ontario, the aggressive jobbers represent a smaller proportion of outlets and less aggressive individual independents a greater proportion in the north than in the south.

Ownership Of Branded Stations

The distinction in branded stations between lessee dealers and independent owners may contribute to regional price differences.

When stations are leased the rental payments are set to reflect the total business opportunity estimated for a location. The payments are not related to, and are usually lower than, an appropriate return on the refinery's investment. This is the case even in areas where business opportunities are particularly great, because in such areas property values also tend to be high. In other words, lessee dealers are, in effect, subsidized by the refineries.

The refineries must make up these subsidies by raising their wholesale gasoline prices, which are charged to all customers. The branded independent owners must pay these higher prices while financing their stations at full cost. In doing so they help subsidize the lessee dealers.

Regional implications arise from the fact that among branded stations lessee dealers are less common and independent owners more common in the north than in the south. Thus, a lower proportion of branded stations is subsidized in the north than in the south, while a higher proportion contributes to the total subsidy.

The effect of this factor is largely theoretical, since there are no data available on what would happen if full economic rents were charged. It has been identified in several previous studies as a major factor (see for example the report of the 1975 Ontario Royal Commission) and dismissed by others as a myth (see U.S. Department of Energy, "Deregulated Gasoline Marketing").

Proximity of Alternative Sources of Supply

A variety of gasoline suppliers improves the bargaining position of independent dealers. All Ontario's refineries are located in the south. In addition, southern retailers have access to products from refiners and terminals in the adjacent states. This access does not affect branded dealers, who are tied to one supplier for their product. However, independent dealers in the south are far more able to negotiate with refiners by playing one off against the others than their more remotely located counterparts in the north. For example, Petrosar, which markets gasoline exclusively through independent resellers, finds nearly all its customers in southern Ontario.

There have been allegations made that some gasoline is entering Ontario mislabelled as fuel oil. This product would then not pay road taxes, although the retailers would charge the full price for the product. This practice is alleged to occur with some frequency at border crossings at Niagara Falls and Fort Erie, and occasionally at Ivy Lea, Windsor, Sarnia, and the Lakehead. The Ministry of Revenue is currently investigating these allegations.

Obviously, access to product on a tax-free basis would have a serious effect on the local price structure.

CUSTOMER BEHAVIOUR

HIGHLIGHTS

- . The gasoline market is segmented, with some customers buying on the basis of price and others on the basis of service.
- . Motorists in southern Ontario are generally more price sensitive than those in the north.
- . In the north, there is a larger service oriented customer base, allowing dealers to charge higher prices.

CUSTOMERS

Gasoline prices are ultimately determined by the interplay of supply and demand. Refiners, jobbers, and retailers represent the forces of supply. Equally important, however, is the role of the consumer on the demand side.

Price Sensitivity

Consumers on average are relatively insensitive to overall price levels. A change in price of 1 cent per litre will cost the average motorist about \$25.00 per year. This is rarely enough to cause a motorist to change driving habits. Large increases in price do have a depressing effect on demand but only over a long time period. The increases in prices that followed the oil price shocks of the seventies slowed the growth in demand, but volumes did not peak in Canada until 1980. Since then, changes in driving habits and more fuel-efficient cars have reduced demand steadily.

Though motorists do not alter their driving habits because of price changes, they can be extremely sensitive to differences in price among competing brands. This sensitivity varies over time and among regions. To a certain extent, high levels of sensitivity are self-perpetuating. The retailers in price-sensitive areas are forced to compete on price. If one dealer attempts to increase market share by discounting the price, the others must react quickly or fall behind. Motorists in such areas reward discounters by giving them their business. Aggressive pricers therefore gain market share.

Market Share

As we have seen, some marketers are less aggressive than others, often allowing competitors a substantial price spread. In price-sensitive areas, this spread is enough to cause substantial shifts in market share. Eventually the high-priced marketer must allow his dealers to lower the price in order to keep them operating.

Under the current system of guaranteed margins, a price reduction by the major brand which has resisted lowering prices the longest is a signal for a renewed round of price reductions. The "market" price at which the refiners will guarantee their set margins is revised downwards. Aggressive dealers know that they can gain market share by lowering their margins, and a new downward cycle begins.

Eventually, the price becomes so low that one or another of the refiners seeks to re-establish prices at a higher level. This is done by raising the price at which the margin will be guaranteed to the retailers and hoping that other marketers will follow suit. The other marketers generally do follow, but the time lag results in lost business for the first marketer to move. Refiners are therefore reluctant to be the first to raise their prices. Some have strategies which call for them to be the second or third to raise prices.

Price Wars

In areas where price wars occur frequently, motorists come to expect them. After price restorations they delay purchasing gasoline. Frequently, when they do make a purchase under such conditions, they buy small volumes rather than filling their tanks. This short-term drop in demand also puts downward pressure on prices and helps initiate a new price war cycle.

Distance between Stations

Where there are many stations in close proximity, each prominently displaying its price, the customer tends to become price-sensitive. Where the stations are spaced further apart, making it more difficult for the customer to compare prices, price sensitivity is lowered. Greater distances between stations also imply that consumers will have to travel further out of their way in order to take advantage of any lower prices that do occur.

Choice of Service

In areas where a wide variety of specialty maintenance services is available, consumers tend to rely less on the local service station for repair work. They buy gasoline at self-serve or discount outlets and are more sensitive to price.

The consumer is the ultimate arbitrator of price spreads within a market. Outlets offering different brands or levels of service are constantly struggling for market share. It is the consumer who determines what price will be paid for these additional levels of service.

In the competitive markets of southern Ontario, these spreads are very narrow, indicating a customer population that is extremely sensitive to price. For example, price differences between adjacent full-service and self-serve major brand outlets during the period surveyed were normally 0.2 cents per litre in southern Ontario. Independents, whether full- or self-serve, offered prices about 0.2¢ below the major brands, self-serve price. These spreads have since increased to about 0.5¢ per litre between full- and self-serve. There was virtually no price spread apparent among stations offering various other services even though the presence of such services often increases the volatility of the market.

In urban areas in northern Ontario, the spreads between full and self-serve outlets are similar or slightly wider than in the south, indicating that, on average, consumers are not as price-sensitive. For example, during the survey period, the average difference between full-serve and self-serve outlets in Sault Ste. Marie was 0.4 cents per litre. Independents were priced 0.4 cents per litre below the self-serve price.

Outside urban areas, self-serve outlets are very rare in the north, because the volumes needed to support such outlets are not available. However, there is a wide variation in the level of service offered, from gas bars selling only gasoline to outlets offering full maintenance and repair services, often operating a tow truck. Price spreads of as much as 6¢ a litre were observed between stations in the same community offering different levels of service. This implies a clear-cut segmentation of the market. Some consumers are willing to pay a substantial premium for their gasoline to a dealer who will also provide them with

dependable service. Other consumers are more interested in saving money on gasoline sales. The result is that both stations are able to exist in close proximity.

Upcoming Developments

Several recent developments are certain to have an impact on the future market for gasoline in Ontario and to affect differences in price from one part of the province to another. Because the effects of these developments have not as yet been fully felt, their impacts are not discussed in the study.

The most significant of these developments are:

- The move to rack pricing
- The Petro-Canada purchase of Gulf Canada assets
- The increased exposure to international events resulting from the Western Accord.

The implications of these developments for the marketing of gasoline in Ontario are discussed in Appendix H.

CHAPTER 7: OTHER STUDIES AND OTHER JURISDICTIONS

HIGHLIGHTS

- . Many other provinces have been concerned with inter-regional price differences.
- . Where regulation has been imposed, prices tend to be higher.
- . Most jurisdictions identify inefficiencies in their marketing systems, but there is little agreement on remedies.
- . The Ontario Royal Commission of 1975 concluded that Ontario consumers are well served.

Several studies of gasoline marketing and prices have been conducted in Canada. These were examined during the course of the study and the findings and recommendations were examined in light of what had been learned of the Ontario market.

Summaries of these studies are presented in Appendix B. However, their salient features are discussed below in relation to the Ontario situation.

The Royal Commission on Petroleum Products Pricing

Particular attention was paid to the 1975 Ontario Royal Commission on Petroleum Products Pricing (The Isbister Commission), because it was the only study which dealt specifically with the Ontario experience.

The principal conclusion of the Commission was that the oil industry in Ontario is competitive and with respect to prices, consumers are being well served. However, it did identify several factors which it believed lessened competition in the market place.

These were:

1. The difference between posted wholesale prices and prices actually realized by the refiners (ie. the practice of guaranteeing retail margins).

2. The difference between wholesale prices to dealers and retail prices at company operated stations (ie. the practice of selling gasoline through company-operated outlets at retail prices below the wholesale price available to independents).
3. The practice of charging less than economic rents for company owned stations leased to dealers, which was seen as possibly discriminating against small northern towns.

The practice of guaranteeing retail margins has spread since the Commission issued its report. The effect of this has been to increase the amount of competitive price activity in the marketplace. However, the incidence of price activity is not uniform, and the practice contributes to differences in prices among regions. The practice also discriminates against independents who do not usually have guaranteed margins available to them.

Imperial Oil is attempting to introduce a system of rack pricing into the market which, if successful, would eliminate guaranteed margins. If this practice is adopted by the other oil companies, then the Commission's first concern will have been resolved.

The practice of supplying company operated stations with gasoline at artificially low transfer prices is not feasible when such prices are also available to all branded dealers through guaranteed margins. While the practice does not appear to be widespread now, it could become so under rack pricing.

The practice of charging lessee dealers less than economic rent for the use of service station properties is still widespread. However, in a market driven system, particularly one characterized by guaranteed margins it is not clear that the oil companies are able to recover the costs of any rent shortfalls through higher gasoline prices.

The Restrictive Trade Practices Commission

The Director of Investigation and Research of the Federal Department of Consumer and Corporate Affairs, after a study lasting seven years, published allegations in 1981 that the major integrated oil companies had engaged in a variety of anti-competitive practices which had resulted in Canadian consumers being overcharged by \$12.1 billion dollars over a period of fifteen years.

The Director also published a variety of recommended remedies. The most significant of these, in terms of their impact on gasoline price differentials in Ontario were:

1. That exclusive dealing in motor fuels be prohibited. This would allow all retailers, regardless of the brand they were displaying, to purchase gasoline from any source.
2. That suppliers of motor fuels be prohibited from obtaining direct or indirect control over retail prices at any outlets other than those which they themselves operated. This would effectively eliminate consignment selling and guaranteed margins.

Nova Scotia: Report and Recommendations on Gasoline Marketing

Nova Scotia published a study in 1976 which concluded that the distribution of gasoline in the province was not efficient in that the resources employed in the industry were under-utilized.

Nova Scotia regulates the wholesale gasoline price in the province by requiring wholesale price changes to be approved by the Public Utility Commission. The PUC also regulates allowable retail margin. The study recommended that wholesale prices be rolled back to reflect the amount of rental subsidy that was deemed to be being recovered through higher gasoline prices.

The study also recommended strict limits on wholesaler operation of retail outlets, controls on discounts off posted prices to dealers and the banning of consignment sales.

Nova Scotia imposes severe limits on the flexibility of gasoline retailing. In addition to regulating wholesale prices and maximum retail margins, the province prohibits self-serve stations and gas bars and controls hours of operation. A recommendation in the study to allow self-serve stations was not adopted.

It is interesting to note that, net of provincial taxes, retail gasoline prices in Nova Scotia are consistently among the highest in the country.

Manitoba

Manitoba published a study in 1983 which examined price differences between Manitoba and northern communities. The study identified higher base costs, freight, bulk station costs and competition as factors contributing to higher wholesale costs. Higher retail margins in the north were attributed to lack of price war activity, smaller sales volumes, higher costs and less price competition.

Quebec

Quebec has undertaken two studies in recent years. The first, published in 1978, examined price differences between regions. It concluded that the best way to realize lower prices was for consumers to keep an eye on prices.

The second study, published in 1984 was prompted by the fact that a reduction in provincial road tax from 40% to 30% had not led to a corresponding decrease in prices.

Both studies recommended that price controls not be implemented, although it was pointed out that legislation enabling such control was already in place.

Alberta

The Alberta government has made a political promise to keep the retail price of gasoline the lowest in the country. This is achieved by not charging a road tax.

A study was published in 1965. It recommended that the refineries be divorced from retail operations. It also identified inefficient marketing resulting from too many stations as a factor which drove up the retail price.

Since 1965, the service sector population has been reduced from 3100 to about 2000. Voluntary lease guidelines have been imposed but no move toward divorcement has been made.

British Columbia

British Columbia published a report in 1975 which identified an excess of service stations as being a major cause of high prices. It recommended limiting the number of subsidized stations operated by each company and limiting the amount of gasoline that

could be sold directly by the major companies in each market area. Gasoline was to be sold at the same price to all dealers, regardless of whether they were lessees or independents.

United States

The United States Department of Energy published the draft of a report in 1984 entitled "Deregulated Gasoline Marketing - Consequences For Competition, Competitors and Consumers". The report strongly suggested that there was no alternative to the competitive process in terms of benefits to competitors and consumers.

Italy

Several countries in Western Europe regulate gasoline retailing. Italy, for example, maintains a common retail price throughout the country.

The effect of this regulation has been to concentrate private sector retail activity in low cost, high volume markets, effectively lowering the level of service available in rural areas. The unprofitable markets were abandoned by the private oil companies to the extent permitted by the regulations, leaving the national oil company with the burden of servicing the market at a loss.

The government has identified this situation as being unacceptable, and is examining ways of deregulating the market.

CHAPTER 8: SUMMARY AND CONCLUSIONS OF THE STUDY

PRICE DIFFERENCES

On average, prices for gasoline are lower in southern Ontario than they are in the north. There are two components of this difference.

1. The underlying price is lower in the south.
2. The south is more prone to price wars, which often lower the price far below normal levels.

In addition, there are large differences in prices between various communities in northern Ontario.

MAIN REASONS

A large number of factors influence prices at any given location. However, these factors can be grouped broadly to arrive at three fundamental reasons for the differences in prices:

1. Market conditions, principally the overall size of the market,
2. Wholesale costs, largely the cost of transporting gasoline from southern refineries, and
3. Retail costs, caused mainly by the fact that the average volume per service station is lower in the north.

Market Conditions

The study shows that the larger the market, the more intense is price competition within it. The gasoline market in northern Ontario is far smaller than the southern market. Furthermore, geography has split it into many small remote markets. The smaller and more remote they are, the higher is the price level and the less frequent is price competition.

The major oil companies differ in their attitudes toward market share and margin. Some have adopted a strategy of maintaining market share even if this has a severe impact on short-term margins and profits. Such companies state that this strategy will pay off in the long run when prices stabilize. Other companies try to maintain prices, and therefore margins, even though the result is a loss of market share. Such companies state that they

believe market share represents only a temporary advantage since consumers no longer have any significant loyalty to particular brands. Nevertheless, even these companies are not indifferent to volumes because they need to maintain their dealer networks and sell their production of gasoline.

The competition for market share is always most severe in larger markets where a small increase in share results in a significant increase in volume.

The Ontario retail gasoline network developed largely in the period following the second world war. Refiners embarked on ambitious programs of building service stations to capture a share of the rapidly expanding market. When the market first peaked and then started to contract in the early eighties, the battle for market share became more serious. At the same time the advent of longer warranties, longer-life radial tires, and longer periods between scheduled maintenance work was depriving the service station owners of a large part of their non-gasoline related income.

Gasoline marketers responded by introducing self-service stations and gas bars and by cross-merchandising with other businesses such as car washes and convenience stores. These new facilities competed much more on price than had the traditional, full-service stations.

This process of change is continuing and will eventually result in a smaller number of stations, each selling a higher volume of gasoline. These changes occurred first in high-volume areas, where loss of market share would have the most serious effect on an individual refiner's gasoline sales.

As a result, stations which compete primarily on price are more common in southern Ontario than they are in the north. Where they do occur in the north, they tend to be in urban areas, resulting in price differences between cities and rural areas.

During the high growth period, the major national brands of gasoline - Shell, Esso, Gulf, and Texaco - all followed strategies which called for a coast-to-coast presence. This resulted in stations being built even where the size of the market could not justify so many outlets. As a result, the average station in northern Ontario services only

about 50 to 60 per cent the number of customers of its counterpart in the south. Most of the costs involved in running a service station are fixed and must be spread over whatever volume of gasoline is sold. Low-volume stations therefore have far higher per-litre costs than do high-volume outlets and require higher margins to remain in business.

The gasoline market in Ontario is extremely competitive, putting severe pressure on both refiners and retailers. In order to protect their dealer networks, refiners have resorted to a number of mechanisms, such as plans which guarantee the dealer a set margin on gasoline sales regardless of how low the market price drops. Originally designed to protect dealers caught in short-term, local price wars, the practice has spread to the point where the vast majority of major-brand dealers throughout Ontario are now selling gasoline in this way. These dealers are removed from any effective control over prices, which are set by the refiners according to their estimates of local market conditions.

These conditions differ from one part of the province to another. Despite the fact that there are more stations per capita in the north, population densities are such that stations tend to be much farther apart than in the south. Differences in prices from one station to another are therefore more noticeable in the south, forcing dealers to compete on price. By contrast, if a northern dealer offers a higher price than his competitor, his volume will not decline as much as in the south.

Wholesale Costs

All Ontario's refineries are located in southern Ontario. On average, therefore, markets in the south are closer to the sources of supply than are those in the north. Because northern Ontario is large and sparsely populated, transportation and distribution costs are higher there.

Retail Costs

Few dealers rely exclusively on sales of gasoline. Most offer a variety of other products and services which usually earn a higher percentage margin. Gasoline sales attract customers to the business and allow the dealer to increase profits on the sale of other products. At very low volumes of gasoline,

the amount of business so attracted is insufficient to maintain the enterprise. The dealer in this situation is forced to devote a large percentage of his effort to the management of the other business, and gasoline sales come to be of relatively minor importance.

Many outlets in northern Ontario, particularly those located in rural areas, have volumes which place them in this category. Dealers in such outlets tend not to be aggressive in pricing because the additional volumes sold by reducing prices are not usually sufficient to compensate for the lower margins. On the other hand, many dealers in southern Ontario are aggressive pricers because additional volumes, even at low margins, result in more sales of products other than gasoline which yield higher margins.

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North South Gasoline Pricing Study - Appendices



Ministry of Energy
Honourable Vincent G. Kerrio
Minister



February, 1986

NORTH SOUTH GASOLINE

PRICING STUDY

APPENDICES

Ministry
of
Energy

Honourable
Vincent G. Kerrio
Minister

Energy
Ontario

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APPENDIX A

SCOPE AND METHOD

Since November 1984 the Ministry of Energy has collected weekly gasoline prices for selected stations in Toronto, Ottawa, Kitchener-Waterloo, and London. In addition, for several years, quarterly price surveys for 28 communities throughout Ontario and bi-monthly volume surveys for metropolitan Toronto have been gathered.

To provide additional data on southern Ontario for the analysis of price differences, the Ministry of Energy undertook a weekly telephone survey of selected centres beginning in early July. The selected centres were:

Brampton	Brockville
Burlington	Chatham
Cornwall	Fort Erie
Gananoque	Guelph
Hamilton	Kingston
Markham	Niagara Falls
Oshawa	Oakville
Pickering	Powassan
Richmond Hill	Sarnia
St. Catharines	Windsor
Thornhill	
Hwy 35 North of Hwy 401 (Orono)	Hwy 11 North of Barrie (Oro Township)

To provide comparable data for northern Ontario, the Ministry of Northern Development and Mines expanded their weekly gasoline pricing survey of 29 communities to cover 76 communities for the period of the study. These prices were gathered by Ministry personnel across the north and provide a data base to measure both north-south and intra-regional differentials. Data were weighted to reflect population when calculating regional averages.

To help determine the reasons for differences, a survey was undertaken of selected communities in both northern and southern Ontario. Students were hired for the purpose, with those working in the north coming from the local communities.

In the north, the centres surveyed were:

Chapleau	Hearst-Kapuskasing
Sault Ste. Marie	Timmins
North Bay	Thunder Bay
Red Lake	Sudbury

Major highways leading out of the centres were also surveyed to measure the extent to which outlying areas affected and were affected by prices in the communities.

During a seven-day period in mid-August the surveyors located all the retail gasoline outlets within the survey boundaries and recorded on a daily basis all posted prices and general market conditions. The latter included such things as:

1. The extent of brand identification by individual stations.
2. The visibility (to the driving public) and extent (number per station) of signage, the type (raised, lowrise, etc.) and size of signs and the degree of brand and grade identification (i.e. posting of regular prices only, regular prices on main sign and other grades on smaller signs, all grades on main sign).
3. Other services offered (i.e. car wash, service bays).
4. Grades of fuel sold (i.e. regular, unleaded, premium, diesel, propane).
5. Credit terms offered (i.e. major credit cards, gas card only, cash only).
6. Hours of business.
7. Age and style of station (including number of pumps and islands), as well as its general appearance.
8. Owner operated or leased (identified by sign over door or question while asking for volume data).
Volume Data
Traffic Flows
9. Abandoned and reduced service outlets.
10. Geographic location and location in relation to other stations.

Surveyors were also asked to make qualitative observations on such factors as the visibility, ease of access and nature of traffic.

Again, to provide data for comparison, three surveys of a similar nature were undertaken in the south. Full market surveys for Chatham and Guelph and a spot location survey of Ottawa were completed.

Using the sample information sheet (Attached), the required information was compiled and summarized. The data obtained did not provide a statistically rigorous determination of market forces across the

province, but when used with other data collected, enabled Ministry staff to gain a better understanding of the forces at work in the marketplace.

To better understand how those involved in retail gasoline industry look upon the current market conditions, Ministry of Energy staff held interviews with the following oil companies:

Imperial Oil (Esso)	Sunoco
Texaco Canada	Petro-Canada
Shell Canada	Ultramar Canada

In addition, an interview was held with Polysar, the only oil refiner in Ontario that does not own a gasoline chain and sells entirely to independent dealers.

In these interviews, the companies were asked to describe their distribution systems in Ontario with emphasis on the north, provide cost data on distribution systems, and to discuss what factors influence prices. They also provided market data such as station count and volume per outlet figures. A copy of the questionnaire used for the interviews is attached.

Information received from the oil companies was given in confidence and is considered commercially sensitive. Where specific information is used in the study, it is done so with the permission of the sources. Other figures used in the report are not company specific, but rather summaries of all the data received from the industry.

Various associations and groups involved in the industry were interviewed: the Automotive Aftermarket Retailers of Ontario (AARO), the Thunder Bay Association of Automotive Trades, the Petroleum Marketers Association of Canada (PMAC), the Canadian Federation of Independent Petroleum Marketers (CFIPM), and the Ontario Petroleum Association (OPA). As well, a total of eighteen dealers was consulted. The issues raised mainly involved the views of these groups on the market conditions for retailing gasoline.

Questionnaire for Oil Company Interviews

The following questionnaire is to be used as a guide in interviewing oil companies. It should be used as a means of focusing the discussion and should not be premitted to inhibit the expression of other factors which may be raised by the oil companies. In all cases, the companies should be asked to give their opinion on how significant the factor is in determining gasoline prices.

Much of the data will be confidential in nature. Some of it the companies may refuse to provide. In these cases it should be made clear that in the absence of data, the Government will use its best estimate, and that errors in such estimates may bias the results. Companies should be assured that any data they provide us which they identify as being confidential will be treated as such.

North/South Gasoline Studies
Oil Company Interviews

Cost Factors

1. Briefly describe your distribution system in Northern Ontario.

- Where do you operate terminals?
Capacities? Costs?
- How much is sold through distributors?
- How does your product reach the north?
Costs?
- How do these costs compare with the south?
- What are the costs in getting your product to the following centres?

Geraldton
Hearst
Kapuskasung

North Bay
Sault Ste. Marie
Sudbury

Timmins
Thunder Bay
Kenora

2. How do you determine leasing charges for dealers at company-owned stations? Are they different from north to south?
3. What other charges does the lessee pay? (e.g. for brand identification or TBRA Service)
4. Are there differences in your pricing policies between north and south?
 - Price support mechanisms?
 - Guaranteed margins?
 - Volume discounts?
 - Others?
5. On average, are there physical differences between service stations in the north and south that would increase the costs of supplying them? (e.g. dump size, scheduling of dumps, type of tank (underground or above ground)).
6. On average, is there a difference in the volume sold per outlet? How big is the difference?
7. In your opinion, what other factors affect differences in dealer operating costs?

Marketing Factors

1. Describe the importance of each of the following factors in determining retail price levels. Which are the most significant causes of differences in price between north and south? Can you quantify any of the differences?

- Brand identification
- Distance between stations
- Number of brands offered
- Number of independent operators
- Relative numbers of company operated, leased and dealer owned stations
- Number of stations per capita
- Traffic flow past station
- Locals versus through traffic
- Differences in local sensitivity to prices
- Credit terms offered
- Service offered
- Grade mix
- Hours of business
- Cost of establishing station
 - permits
 - land
 - construction
- Others

STUDENT SURVEY METHODOLOGY

This paper outlines the method by which the detailed survey of gasoline prices for specific centres will be undertaken. It will be used to brief the summer students that will be hired to complete the survey.

The purpose of the students' activities is to determine as definitively as possible the differences in market conditions which result in differences in prices. The data obtained will not provide a statistically rigorous answer, but when combined with data from other sources, will enable us to gain a better understanding of the forces at work.

Students to handle the Southern Ontario surveys will be hired through the Ministry of Energy and assigned to the centres of Guelph, Chatham and Ottawa. It is planned that there will be one group of two students for each survey centre. The actual survey borders will be set by Ministry staff and will consist of the city proper and surrounding areas in the first two surveys and selected market areas in the Ottawa survey. The student supervisor for the Ministry of Energy will be Tim Sharp, who has been contracted to act as a research analyst on the project.

The Ministry of Northern Affairs will handle the hiring of students for Northern Ontario and the final selection of centres to be surveyed. The current list of centres includes:

Chapleau	Hearst-Kapuskasing
Sault Ste. Marie	Timmins
North Bay	Thunder Bay
Red Lake	Sudbury

Major highways leading out of the centres will also be surveyed for gasoline prices for a distance to be set by MNA and Ministry of Energy.

The students will be assigned a seven-day period in which they will locate all the retail gasoline outlets within the survey borders and record all posted prices on a daily basis. They will also be asked to observe such details as:

1. The extent of brand identification by individual stations.

2. The visibility (to the driving public) and extent (number per station) of signage, with regard to type (raised, lowrise, etc.), size and the degree of brand and grade identification (ie. do they post regular prices only, regular prices on main sign and other grades on smaller signs, all grades on main sign).
3. Other services offered (ie. car wash, service bays).
4. Grades of fuel sold (i.e. regular, unleaded, premium, diesel, propane).
5. Credit terms offered (i.e. major credit cards, gas card only, cash only).
6. Hours of business.
7. Age and style of station (including number of pumps and islands), as well as general appearance of station.
8. Owner operated or leased (Identified by sign over door or question while asking for volume data).
9. Abandoned and reduced service outlets.
10. Geographic location and location in regard to other stations.

They will also be asked to make observations based partially on opinion, with regard to such things as visibility and access to stations and their location relative to other regions (where does real competition lie).

They will be asked to approach station operators only to inquire about the volume pumped at each station. The operator may or may not give this information and students must not press unwilling subjects. The volume data will be important in judging assumptions on market conditions and volume discounts vs. prices. If possible, volume should be obtained on a monthly basis. If station operators withhold volume data, students will be instructed to note stations in close proximity that have markedly different prices (over what can be expected in services offered and brand type). The students will make closer surveys of the stations involved, including traffic counts through the stations over a 1/2 hour period. These data will be used to gauge price sensitivity in the different markets.

Students must be discreet in their actions and contact with the public. They are not to engage any member of the public in questionings or debate. If a person should wish to volunteer an opinion, the students are to listen, note the comment and include it in their general reports. If the person is persistent in questioning or desires more information, the students are to arrange contact with Ministry personnel.

Where two or more stations in close proximity to each other report substantially different volumes of sales despite similar price structures, the students should attempt to explain why they believe these differences occur, with particular reference to the factors listed above.

The students will also visit area Ministry of Transportation and Communications offices and local Government and Tourism offices to collect the following where available:

1. Automobile registrations (Available through MTC Downsview)
2. Fleet vs private vehicles (Local government)
3. Tourist traffic (MTC and Tourist Board, also Tourism and Recreation)
4. Disposable income (Local government or Statistics Canada)
5. Traffic volumes travelling past stations (MTC and local government)
6. Municipal taxes on retail outlets (Local government)

Some of these data may be only available in Toronto through Ministry staff. The students are encouraged to try to obtain as much in the field as possible.

Again, students must limit their scope of activities when searching out this data. However, any general patterns of problems or activity should be noted and included in the report.

To facilitate contact, the students will be issued I.D. cards and letters of introduction from suitable senior ministry staff in order to explain the general purpose of their work and help deflect any local scrutiny from the students.

After the survey period has been completed, the students will complete their reports within one week. It will include daily prices within the region surveyed, the summary of station characteristics and local market data obtained from MTC, local government and Tourist Boards. They will be encouraged to include any linkages and observations either observed or noted by local people, as well as comments from interested parties.

Student surveys should be started by the week of August 12 and the reports completed by the end of the week of August 19.

DETAILED MARKET SURVEY - OTTAWA SPOT LOCATION

Old #7 (Richmond Rd.) - Bells Corners

From railway overpass at west end to railway overpass at east end

Base Line Rd., between Greenbank Rd. and Merivale Rd.
(all four corners at intersections)

Carling Ave., between Woodroffe Ave. and Fisher Ave.
(all four corners at intersections)

Bank St., between Riverside Dr. and Walkley Rd.
(all four corners at intersections)

St. Laurent Blvd., between Russell Rd. and Donald St.
(all four corners at intersections)

Bronson Ave., between Colonel By Drive and Laurier Ave.
(all four corners at intersections)

Montreal Rd. (#17B) - St. Joseph Blvd. (Old #17),
between Rideau River and Champlain
St. (Orleans)

Survey if applicable

#16 between Regional Rd. #8 and Baseline Rd.

APPENDIX B

SUMMARIES OF OTHER STUDIES

The Royal Commission on Petroleum Products Pricing

On July 16, 1975, an Ontario Royal Commission on Petroleum Products Pricing was established. The Commission, headed by Claude Isbister, was directed by the Province to inquire into and report on:

- (a) inventories available to Ontario of crude oil and petroleum products,
- (b) any changes (other than those directly attributable to changes in the price of crude oil) in the price of petroleum products sold in Ontario, and
- (c) the relationship between any such price changes and the interests of the consuming public of Ontario, particularly with consideration being given to,
 - the adequacy of any petroleum product pricing guidelines established by the Federal Government as they may apply to Ontario;
 - working capital requirements of the petroleum industry;
 - the continuity of supply in Ontario of crude oil and more particularly petroleum products; and
- (d) consideration as to procedures that might be followed in relation to future changes in the price of crude oil.

Under the third point of its Terms of Reference, the Commission focused its inquiry on the petroleum refining and marketing industry in Ontario. The Commission's major conclusions and recommendations for this part of the inquiry centered on the following issues regarding the industry's structure and profitability, and gasoline retailing.

I INDUSTRY STRUCTURE AND PROFITABILITY

(a) Competition

The evidence presented to the Commission showed that in spite of a seven-company oligopolistic structure and the possibility of price control,

the refinery industry was competitive and markets were efficiently performing the task of allocation. The industry showed its capacity to introduce innovative methods in retailing and to adapt to the changing patterns of demand. In fact, the Commission found that profits and return on capital in Ontario was moderate to low for the industry.

CONCLUSION: The oil industry is competitive, and with respect to prices consumers are being well served.

(b) Profitability of the Major Oil Companies in Ontario

The Commission found that while earnings had risen in recent years preceeding the inquiry, they were not very high in comparison with other Canadian industries and were below the company's cost of capital. The Ontario results were based largely on each company's estimated allocation to the province of the overhead and employed capital that are national in scope. The Commission was satisfied that the oil companies had not presented their figures so as to make Ontario's returns seem less than they were.

RECOMMENDATION: The companies should include rates of return from refining and marketing in their annual reports.

STATUS: Since the publication of the Royal Commission's report, all the major integrated oil companies have reorganized to separate their upstream operations (exploration and production) from the downstream (refining and marketing). Although the financial statements included in the annual reports of these companies are consolidated, most include figures on the rates of return in the downstream sector.

(c) Competitive Markets or Provincial Price Controls

During its inquiry, the Commission concluded that the unique production processes in the refining industry did not lend themselves to price regulations. There are so many different products that are made from refining a single

barrel of crude oil that it is virtually impossible to say what the production cost is of any single product. The Commission believed that there could be no agreement provided by the industry or regulating authority as to how to set a price for each petroleum product. Therefore, the Commission concluded that the existing markets gave better service to consumers than would result from government regulation and in fact believed prices would be increased under regulation. The users and consumers of petroleum products would lose if a regulated pricing scheme were to replace the present marketing structure, which creates incentives for operating efficiency and is holding profits down.

RECOMMENDATION: In the interest of consumers, Ontario should avoid the establishment of an agency to regulate prices.

STATUS: Ontario has taken no steps toward the regulation of prices. However, the Ministry of Energy regularly monitors prices throughout the province.

II GASOLINE RETAILING

(d) Wholesale Prices and Consignment Sales

The most contentious issues brought before the Commission were those concerning the merchandising of gasoline. One issue in this area was the practice of "consignment selling" by the majors. "Consignment selling" is a form of financial support extended by the major oil company to its lessee dealers when the retail price for gasoline is competitively reduced below wholesale prices. Under a "consignment sales" system the oil companies accept a lower wholesale price, guaranteeing the dealer a fixed operating margin until normal pricing is restored. Under this arrangement, the oil company retains ownership of the gasoline and sets the price at which the retailer can sell the gasoline. The Commission found that the frequency of consignment selling was such that the practice was becoming more the rule than the exception. With consignment selling at almost 85% of the majors brand-name sales, a

significant portion of gasoline sales in Ontario were becoming subject to oil company retail pricing.

The Commission could not find any evidence that the elimination of consignment selling would be desirable for the industry. However, the Commission agreed that the current situation was not ideal. Consignment selling could be a potential device for actually initiating price wars rather than just a support mechanism to meet local instances of price competition. In addition, in certain parts of the province like Northern Ontario where competitive forces don't appear as strongly, dealers don't experience the same opportunities for reducing the wholesale price for gasoline and consumers are consequently required to pay the higher posted - tankwagon prices.

CONCLUSIONS: There is no formula by which a government statute could restore desirable balances (between wholesale prices and retail prices) without creating further discrepancies that would be more objectionable to consumers.

RECOMMENDATION: The Ministry of Energy should arrange annual consultations with each of the majors commencing a year hence with regard to the progress being achieved in the restoration of more normal pricing relationships.

STATUS: The Ministry of Energy meets frequently with each of the major oil companies. However no regular meetings have been held with the specific purpose of examining progress toward more normal pricing relationships. Since the publication of the Royal Commission report, the percentage of major brand-name sales sold on consignment or under guaranteed margin schemes is estimated to have increased. Current moves by Esso and Shell to introduce a system of rack pricing are designed, among other things, to reduce the incidence of consignment selling.

(e) Rentals Charged on Retailing Premises

The Commission found that the collection of rents by the oil companies for properties leased by their dealers were not normally collected on the basis of a fixed charged related to the annual carrying costs of land and facilities at a particular location. Rather, in order to protect its dealers from the swings in volume and price levels, rental charges had been based on sales volumes and income from service bays. The Commission found reason to believe that the treatment of rents in this manner can generate inefficiency in retailing and excess capacity. A dealer with low volumes pays less rent than the annual carrying costs to the oil company for the land and facilities and is then able to survive in the marketplace. The treatment of rents on a variable basis was found to be an implicit rent subsidy keeping marginal outlets at the expense of more profitable outlets and in fact contributed to the overcapacity situation that developed in the gasoline retail market.

RECOMMENDATION:

The companies should consider these rents with the objective of moving towards fixed annual rentals that bear a closer relationship to the values of individual properties.

STATUS:

Most major oil companies have moved away from rents tied directly to sales of gasoline and other products. Most leases are now based on negotiations between the company and its lessee and are based on a predetermined business opportunity for the particular location over the period of the lease. This system still bears little relationship to the annual carrying costs of land and facilities.

(f) Northern Ontario

From the evidence presented at the Commission, it was shown that in market areas of comparatively weaker competition, that the major oil companies were more successful in collecting full posted prices for gasoline. While there seemed to be a general problem of this nature in isolated communities across Ontario, most of the

evidence was focussed on the small isolated regions of the North. In these areas consumers appeared to have a restricted number of options for buying gasoline. Self serve stations were not at that time prevalent in the North and operating margins of the dealers were higher than in other areas.

The oil companies explained the difference in prices for gasoline in the North on extra transportation costs to areas furthest from southern refineries. The Commission found this to be true to some extent. Of the 13.4¢/gallon price differential the Commission studied between Toronto and Kapuskasing, 5.4¢ was accounted for in extra-transportation costs. The realization of tankwagon prices in the absence of consignment selling opportunities in Kapuskasing meant that the wholesale price to dealers at that time was about 4.7¢/gallon higher in the North than in Toronto and consequently dealer margins were about 3.3¢/gallon higher in Kapuskasing. From this study, the Commission found that of the 13.4¢/gallon difference between north and south, 8.0¢ (4.7¢ + 3.3¢) was associated with price components that remained high because of a lower level of competition in the market and the lack of associated discounting opportunities.

RECOMMENDATION:

The companies should address themselves to the question of pricing in such communities through provision of the most modern and efficient retailing techniques that are consistent with the size of a particular market and early application in the North of the recommendations pertaining to property rentals and consideration of the relationships between posted prices and actual prices.

STATUS:

Implementation of modern and efficient retailing techniques usually requires extensive investment in new facilities. Such potential investments must compete for corporate funds, not only with similar investments elsewhere, but also with projects for, among others, refinery modifications and pollution abatement. The size

of the market in the north has not been sufficient to justify, as yet, the necessary investment except in the largest urban centres.

The incidence of company-owned stations in the north is far lower than it is in the south. This lessens the opportunity for the major companies to affect the market by subsidizing rentals.

The introduction of rack pricing by Imperial and Shell, if successful, should reduce the difference between posted and actual prices.

(g) Furnace Fuel and Commercial Products

In its examination of the furnace fuel market, the Commission found that the competitive pressures on producers appeared to be less intense in comparison to the gasoline market. Retail sales of furnace fuel oil were typically made at posted prices.

CONCLUSION: Selected product markets reviewed are competitive and functioning with at least reasonable efficiency and there is no requirement for governmental intervention.

(h) Uniform Wholesale Pricing

The Commission could not find any evidence to support some submissions suggesting that the major oil companies stop using posted prices and sell gasoline to dealers at a uniform wholesale price plus whatever mark ups are appropriate to cover the costs involved in the particular line of business. The Commission believed that competition, when working well, would avoid price discrimination among the different categories of sales.

CONCLUSION: From the point of view of the consuming public the abolition of the posted price cannot be endorsed at present as leading to increased competition or other identifiable reforms.

(i) Divorcement of Retail and Wholesale Levels

Some evidence presented to the Commission suggested that oil companies be prohibited, through divorcement legislation, from operating retail outlets in competition with lessee dealers although the oil companies could continue to own outlets. The Commission acknowledged that the relationship between lessee dealers and the oil companies might feasibly be improved, however, the Commission wrote that it could not consider the proposal for further investigation on grounds other than consumer interests. In this respect, the Commission believed that divorcement would probably lead to higher prices for consumers. It also noted that there was no apparent record of substantial consideration from which Ontario might be able to anticipate the impacts of such a change.

RECOMMENDATION: The Government should proceed no further with proposals for divorcement that have been put before it.

STATUS: The Government has taken no steps to proceed with divorcement. The Director of Investigations has recommended divorcement remedies to the Restrictive Trade Practices Commission.

(j) Divestiture of Retailing Operations by the Integrated Major Oil Companies

There was a single presentation to the Commission recommending that oil companies be prohibited from owning sites and facilities used for the retail sale of gasoline as a measure promoting competition. The Commission believed that such a proposal would create more administrative and legal problems than divorcement.

CONCLUSION: A measure of this kind is neither necessary nor desirable in Ontario.

(k) Prohibition of Self-Serves Operated by Oil Companies

Recommendations made to the Commission included the prohibition of the direct operation of self

serve stations by the oil companies, in favour of lessee dealers. The Commission felt that since self serves still required management, that lessee operation would occur after a trial period with the self serve mode of retailing. The Commission found no reason to fear that service and repair facilities would disappear with the advent of self-serve retailing and that consumers would be better served with more efficient distribution of gasoline.

CONCLUSION: It is in the interest of consumers that the oil companies not be prevented from getting ahead with rationalized and more efficient modes of distribution including self-serves.

(1) Taxes, Royalties and Products Pricing

The Commission found it very important to note that while prices of gasoline and other products have continued to rise, taxes and royalties on crude oil production at home and abroad were responsible for most of the increase. Only a small portion could be attributed to growth in the refiners costs and revenues and that most consumers did not fully understand this.

CONCLUSION: An extraordinary divergence has developed between public opinions that are focused adversely on the oil industry alone and, in contrast, the facts of the current situation. There are even greater public interests involved in the fiscal measures of the federal and provincial governments, which are the larger claimants on the dollar spent by the consumer on petroleum products.

(m) The Dealers

The Commission was considerably impressed by the plight of many retail dealers who faced bankruptcy during the period the Commission was examining. However, the Commission did not believe that the proposals the dealers forwarded would save them from going out of business any more than it believed that the problems were created by predatory oil companies. The Commission found that Ontario's petroleum products industry was a highly competitive

market and it was this situation that resulted in a decrease in the number of viable, efficient retail outlets.

CONCLUSION:

Any measures of governmental intervention in present plight of many lessee dealers and regulation in support of them would have to be justified on grounds other than the interests of consumers to which the Commission is directed.

Restrictive Trade Practices Commission

On

The State Of Competition In

The Canadian Petroleum Industry

Summary

In 1981, the Director of Investigation and Research of the Federal Department of Consumer and Corporate Affairs Canada, completed a seven year inquiry into the state of competition in the Canadian petroleum industry. Under the Combines Investigation Act, the Director issued a seven-volume statement (subsequently referred to as the "Green Books") alleging that the major integrated petroleum companies in Canada engaged in predatory and anticompetitive practices between 1958 and 1973 to the detriment of Canadian consumers. The Director estimated that for that period, Canadian consumers were overcharged \$12.1 billion (in 1980 dollars).

Over the next four years, until October 1985, the Restrictive Trade Practices Commission convened a series of public hearings to examine evidence and hear argument relating to the Director's statement and proposed remedies for three areas of the petroleum industry: i) The International Sector, ii) The Refining Sector, and iii) The Marketing Sector. Evidence was received from the major oil companies, the Director of Investigation and Research, Energy Mines and Resources Canada, various associations representing dealers, petroleum marketers, retailers, automotive product distributors and consumers, as well as from interested individuals.

The remedies proposed by the Director in the original Green Books were revised a number of times over the course of the Commission's inquiry partly in response to ongoing changes in the dynamic petroleum industry environment, and partly to clarify the viability of some of the remedies. The Commission has yet to release its report, having only recently concluded hearings. The final report of the Restrictive Trade Practices Commission may or may not accept, modify or dismiss any or all of the remedies proposed for the petroleum industry and which were filed in the Director's final submission to the Commission on August 22, 1984.

THE PROPOSED REMEDIES

i) International Sector

1. The mandate of the Oil Import Compensation Program be expanded to explicitly encourage more efficient purchasing of imported crude oil, and that its compensation calculation methodology be amended to provide the incentive necessary to fulfill its new mandate.
2. In the case of all transactions involving the acquisition of imported crude oil from a related or affiliated party, receipt of compensation be made conditional upon the provision of satisfactory documentary evidence indicating the initial cost of the crude oil to the integrated network.
3. The data supplied in compliance with International Remedy 2 be used by the Department of Energy, Mines and Resources to maintain a record of first purchaser costs to the integrated networks, and that this information be provided to the Department of National Revenue for its use in determining "fair market value" with respect to crude oil transfer prices.
4. Motor fuel imports be permitted to remain free from government regulatory restrictions as to volumes and territorial disposition, and that such imports be permitted to continue entering Canada duty-free and in a fashion that does not discriminate between motor fuels, crude oil or other petroleum products.
5. The Income Tax Act be amended to provide that, in the case of affiliated transfer transactions, the fair market value of imported crude oil will be the lower of:
 - i) the actual price paid;
 - ii) the price of quality adjusted Canadian crude oil landed at the relevant refinery, as determined by the Department of Energy, Mines and Resources; or
 - iii) the price revealed in comparable third-party arm's length transactions in the international market.

ii) Refining Sector

6. All reciprocal (i.e. interdependent) supply arrangements between refiners in excess of 90 days be prohibited, except that any such arrangement already in existence may be continued if, upon review by the Restrictive Trade Practices Commission it, or a modification of it, is found to have a beneficial effect upon competition.
7. All other existing or future supply arrangements between refiners exceeding two years in duration be prohibited unless, upon review by the Restrictive Trade Practices Commission, it is found to be likely to have a beneficial effect upon competition.

iii) Marketing Sector

8. Covenants restricting the use of property for the sale of motor fuels or limiting the source of supply of motor fuels to the purchaser of such property be prohibited.
9. Exclusive dealing in motor fuels be prohibited. This prohibition would provide that any retailer of motor fuels be free to purchase motor fuels from any source and market through any facilities provided that the motor fuels meet specifications established by the Canadian General Standards Board (currently specification CDN 2-3.1 - M78).
10. Restrictions on advertising tires, batteries, accessories, lubricants, greases and motor oils from any particular source be prohibited.
11. Marketers be permitted to indicate the manufacturer of the motor fuels being sold.
12. Suppliers of motor fuels and affiliates be prohibited from obtaining direct or indirect control over retail prices of motor fuels at any marketing outlets other than outlets that the supplier owns and operates directly.

13. Any acquisition by refiners of retail motor fuel outlets be subject to the approval of the Restrictive Trade Practices Commission.
14. The Combines Investigation Act be amended to provide for Interim Supply Orders under Section 31.2.

NOVA SCOTIA

A study of gasoline marketing was reported in a published document March 16, 1976.

The interrelated objectives of the study included:

- 1) Reduction in the excessive number of outlets so as to reduce the total cost of the distribution system.
- 2) More effective price competition among retail outlets.
- 3) Broader choice as to the mix of facilities for consumers.
- 4) The creation of an environment more conducive to the establishment of independent retail outlets and independent wholesalers.
- 5) The encouragement of greater price competition among wholesalers.

Gasoline marketing is regulated as a utility coming under the jurisdiction of The Board of Commissioners of Public Utilities.

- The Board regulates the dealer retail margin and the wholesale price (Dealer tank wagon price).
- They also regulate hours of operation, building permits, service levels and other activities.

BRITISH COLUMBIA

The 1975 study pertained to the operating mode for service stations as well as the contractual obligations assumed by brand company dealers who leased or had supply contracts.

- The study blames the over supply of service stations as a root problem. A rationalization of stations would logically achieve:

1. Higher gasoline sales volumes per station.
2. A lower unit labour cost for pumping gasoline.
3. A lower retail margin due to higher volume.
4. Motorists in rural areas would benefit from lower prices.
5. A dealer "bill of rights" would bring competitive practices and enable dealers to become independent business people.
6. The major companies should be able to earn normal profits. Normal profits = 1% above price.

P.E.I.

A commission under jurisdiction of the P.E.I. Public Utilities regulates all aspects of gasoline retailing.

There is no useful information from the reports on public hearings regarding licensing of self serves, cross merchandising, gasoline promotion and the relationships between service bays and gasoline sales.

QUEBEC

Two significant studies in this Province have been examined, the first dated October 1978 and the later July 1984.

The 1978 report acknowledged that variance in gasoline price do exist but not at unreasonable levels.

The Minister of Energy stated "Consumers should set the forces of competition in motion in their own areas, by grouping together and by intervening, in short, in the most efficient way possible keeping an eye on prices".

He advised that legislation for government intervention, to control retail prices for gasoline exists. There has not been evidence produced to call forth enforcement of this legislation.

The latest study (1984) was undertaken with the following mandate:

- 1) Determining the reasons for gasoline prices remaining at or near the level which had prevailed during the months preceding the reduction of the gasoline tax from 40% to 30%.
- 2) Enquire into the circumstances surrounding this state of affairs and, to this end, meet with industry representatives.
- 3) Examine and report on the measures to be taken to ensure a fair price for gasoline in Quebec.

The study conclusions were, in summary:

- 1) Intensive price wars had kept prices unreasonably low. Late in 1983 events started to change and prices moved up to more realistic levels and this continued through the time when taxes were reduced.
- 2) The analysis undertaken by this task force explored the potential benefit from a gasoline price control agency. This was believed to be inappropriate for Quebec. Stimulating competition from alternate fuels and continuing to monitor petroleum industry pricing are the key elements to ensure consumers have access to fair gasoline pricing.
- 3) There is no evidence that new procedures could improve on the current fairness in gasoline pricing.

No changes are recommended from either study.

ALBERTA

The study dealt primarily with the economic health of the service station business for the retail dealer.

The task force examined the behaviour of both the refiners/wholesaler and the retail dealer.

The industry was described as being inefficient, thus leading to higher retail prices which offset higher distribution costs. This inefficiency was deemed to be the cause for the strange behavior of retailers. The strange behaviour of the retailers includes accepting various uneconomic practices suggested by their supplying oil company who also owned the station.

To achieve profitable sales from gasoline, refiners receive their best price on sales to their retailers who are tied to them through sales agreements. A summary of the study shows:

- Service station population 1965 - 3100 stations: 38% of the stations are operated by lessees, they sell 62% of the gasoline retailed in Alberta in 1965.
- All "branded retailers" have a supply agreement with the brand company they represent.
- Gross profits from 67,500 gal. of gasoline were required to pay the annual cost of one pump attendant.
- 54% of all outlets in Alberta sold less than 50,000 gallons in 1965.
- 72% of all outlets sold less than 100,000 gallons annually.
- One oil company criteria stated that a population of 10,000 could support a group of six stations representing six brands.
- The inefficient marketing of gasoline drives up retail price.

With tied sales, the only way to secure market access is to own or control branded stations - the alternatives could be to have one station with 6 brands

- Gasoline is 52% of a refinery output and is 59% of the dollar realization

RECOMMENDATION SUMMARY

Divorce the refining company from the retail operation; permit the reseller to be independent to buy, sell and operate as deemed necessary by him to achieve his economic goals.

It was expected that the independent approach would eliminate marketing inefficiencies built into tied sales, and ultimately reduce retail operating costs which would be reflected in lower retail prices for gasoline.

The service station population has been reduced from 3100 in 1965 to about 2000 in 1985.

The absence of sales tax in Alberta keeps retail prices at the lowest level in Canada. A political promise to keep the retail price for gasoline down is achieved in this way.

While voluntary lease guidelines have been employed, no move toward divorcement has been made.

MANITOBA

The main objective was to quantify and explain the gasoline price difference between Winnipeg and northern locations and identify concerns that may warrant further investigation.

Example of retail price difference

In February of 1983, a price war was occurring in Winnipeg and retail prices varied in the city, as did the retail price difference between Winnipeg and northern locations. An example of this difference is between one company's retail outlet prices in Winnipeg and two of their northern locations. On one date the two northern locations were 21.7 and 17.4 cents higher and on a second date in February the difference was 6.1 and 1.8 cents higher.

At the majority of northern market locations the difference was more than 5.0 cents per litre when compared to non-price war retail prices in Winnipeg.

More than half of the difference is attributed to higher retail margins of northern retailers. The balance is due to higher northern wholesale prices.

Reasons for the higher wholesale price are attributed to:

- | | |
|----------------------|-----------------------|
| 1) higher base price | 3) bulk station costs |
| 2) freight | 4) competition |

There were some cases where the entire wholesale cost was not recovered in the wholesale price.

Reasons for the higher retail margins in northern locations are attributed to:

- 1) Frequent occurrence of price wars in Winnipeg which tend to reduce normal margins to a minimum.
- 2) Smaller sales volumes in the north.
- 3) Greater retailing costs; i.e. labour, maintenance.
- 4) Less price competition.

Reasons for the frequent price wars in Winnipeg are attributed to:

- 1) Attempts by individual retailers to increase their market share which are more likely to

succeed in Winnipeg due to the significantly larger market potential.

- 2) Oil companies attempt to increase their market share in the larger Winnipeg market.
- 3) The lack of private brand retailers in northern locations due to the small market potentials removes this competitive element which relies on lower prices to attract sales.

Concerns that may warrant further investigation in the three areas of investigation are listed with the key issues.

1) Price Wars in Winnipeg

Due to their frequency in Winnipeg, a lower wholesale price is in effect while they continue to use the published list price in determining northern wholesale prices. This is the difference between the two markets, from which two issues arise:

- a) What is the extent and frequency where effective wholesale price difference between Winnipeg and northern locations exceed distribution costs from the supply source to northern retailers?
- b) Should the effectively realized Winnipeg wholesale price replace the listed price in determining northern wholesale prices?

2) Higher Northern Wholesale Prices

The overall questions are:

- 1) Do some northern wholesale costs reflect price determination methods rather than actual distribution costs from the supply source to the retailer?
- 2) Would prices be lower in the north if Regina list prices were used for those locations supplied from there?
- 3) To what extent would direct deliveries from Winnipeg or Regina reduce wholesale prices? (This would bypass the bulk plant in the North, thus eliminating a step in distribution handling and related costs).

- 4) To what extent are northern prices effectively reduced by the companies subsidizing retailers by such means as cross leases, or payment of retailers utility costs?

3) Higher retail margins:

The key question is, are these a reflection of higher costs or less competition?

There were examples of higher sales volumes occurring where prices were higher than outlets with lower prices. This indicated consumers were not aware of the higher price or indifferent. No consumer behaviour was examined.

This study presented no conclusions with regard to the differences that still exist in the retail pricing of gasoline between Winnipeg and northern market areas.

GASOLINE MARKETING IN OTHER COUNTRIES

UNITED STATES

A study released in 1984 describing the consequences for competition, competitors, and consumers, examines the results from decontrol of the petroleum industry beginning January 28, 1981.

The report is a draft which examines all aspects of this industry. It clearly states that "vigorous competition occurring in the marketplace since decontrol is caused by underlying structural changes in costs, consumer demand and consumer preference."

The report demonstrates there is no alternative to the competitive process in terms of benefits for the competitors and consumers.

The executive summary of the report is attached.

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DRAFT

DEREGULATED GASOLINE MARKETING

Consequences for Competition,
Competitors, and Consumers

U.S. Department of Energy
Assistant Secretary for Congressional,
Intergovernmental and Public Affairs
Office of Competition
Washington, D.C. 20585

March 1984

EXECUTIVE SUMMARY

With the stroke of a pen on January 28, 1981, the era of price and allocation controls ended in the petroleum industry. The gasoline marketing segment of the industry suddenly was thrust back to reliance on the competitive process after relying on the variable wisdom and largess of government regulation for almost eight years. This study examines what has happened to the gasoline marketing industry since decontrol became effective.

The major tentative conclusion of this study is that the vigorous competition occurring in the marketplace since decontrol is caused by underlying structural changes in costs, consumer demand and consumer preferences. The market changes are not the result of anticompetitive activity, but the result of the competitive process itself forcing adaptation to these underlying structural changes. The many legislative proposals now circulating at both the federal and state level are unwarranted efforts to block or undo the effects of these market forces. At best they are useless. At worst they are expensive counter-productive efforts to deny consumers the benefits of increased competition and efficiency. Ultimately, these legislative proposals hurt the very businessmen they ostensibly are intended to help, while they harm the competitive process, competitors and consumers.

A. The Gasoline Market Since Decontrol

Historic growth in gasoline consumption slowed significantly during the 1970s peaking in 1978. The changes in consumption growth were due primarily to rapidly increasing gasoline prices. These changes in the pattern of gasoline consumption led to substantial changes in the capital stock, including refinery closings and mothballings and decreases in the number of service stations. Refinery capacity decreased by about 7.6 per cent since 1981, the peak year, and the number of service stations decreased by over 50 per cent since the early 1970s. The increase in the average volume pumped per station further reduced the number of service stations needed to distribute the reduced consumption of gasoline. The change in average station volume, in turn, was driven by basic changes in distribution economics including increasing real estate values, increasing operating costs, changing consumer preferences for service and branded products,

increasing labor costs, and increasing credit costs. These changes made high volume, low margin operations more profitable.

The rapidly changing nature of the market forced refiners to review their marketing operations. Many refiners decided to concentrate in areas where they had cost or consumer acceptance advantages. This led to significant geographic market consolidations and a regionalization of the market. This regionalization led to increased competition as the newly consolidated marketing operations sought to maintain their previous marketing volumes. With stagnant or declining demand, this volume must come from other marketers (including those abandoning the areas in question).

The structural changes led most marketers to a searching reexamination of their channels of distribution. There are two primary channels of gasoline distribution, the direct channel through dealers or company operations and the indirect channel through jobbers or other types of wholesalers. This study's examination of distribution economics led to several findings. A refiner used a jobber to distribute its gasoline only when the jobber accomplished the wholesaling function cheaper than the refiner could or when the jobber offered some special market advantage such as knowledge of the local market. Jobbers often had cost advantages at lower volumes due to multibranding (selling more than one brand), multifuelling (distributing fuel oil or propane as well as gasoline), simpler management structures, or lower labor costs. As the refiner's volume increased in a particular market, the cost advantage of the jobber vis-a-vis the refiner tended to disappear.

The confluence of all of these structural changes, in tandem with the loss of the government granted advantages that jobbers had under controls, placed many jobbers in direct competition with their suppliers. The ability to remain cost competitive required changes in jobber operations. Jobbers remained cost competitive by extensive efforts at cost reduction, including increased volume through internal growth or through mergers and consolidations. Further jobbers effectiveness depends upon the ability to continue cost reduction efforts to maintain cost advantages over their suppliers. This requires an ability to develop a low-margin, high-volume strategy to

maintain their desirability as an economic alternative to direct distribution.

Jobbers voiced complaints regarding the market activities of their suppliers. These complaints originated primarily in markets where jobbers expanded during the control period. In many cases, expansion resulted from marketing advantages created by special treatment under the regulations, not because of lower costs or more efficient operations. With the cessation of controls, refiners moved to reclaim those markets which were more profitable to serve directly. These tensions will continue as long as a residuum of these artificially created advantages remain.

In addition to reevaluating the choice of distribution channels between direct and indirect, refiners reevaluated the choice of the type of retail outlet to use within the direct network. The refiners' choices included lessee dealers (the refiner owns the station and leases it to a dealer), open dealers (the dealer owns the station or leases from a third party), and company operations (the refiner operates the station with its own or contract employees). Open dealers suffered the largest relative or percentage decrease in share of gasoline distributed, since open dealers operated primarily in rural areas where refiners' market shares and sales volumes were lowest. These low market share areas were the geographic areas consolidating companies were likely to abandon first.

The relative share of gasoline volume distributed through company operations remained about constant since decontrol. Lessee dealers lost relative gasoline market share to jobber operations until the latter part of 1982. Since then the situation reversed and there were small gains.

A significant conclusion of the study is that, in general, lessee dealers tend to be stronger where a refiner's company operations are strong. In turn, jobbers tend to gain where the direct network--dealers and company operations--are losing market share. The fortunes of dealers and company operations are tied together. This is important because dealers often mistakenly see the company operations as the culprit in their complaints. In fact, however, the dealers and company operations form

a mutually supporting system backed by company advertising and promotion.

B. Case Studies

The detailed case studies illustrate two points.

- o The complexities of multiproducts pricing along with competitive and volume rebates may make any effort simply to compare "street prices" of a particular grade of gasoline on a particular day very misleading. Predatory pricing cannot be proved merely by comparing street prices and wholesale prices.
- o Companies have a range of marketing strategies which depend not only upon their own strengths and weaknesses in each market, but also upon differing views of what the future holds. This is precisely what we should expect in a competitive market, with winners being rewarded and losers being punished if the competitive process is to be effective.

C. The Impact of Existing Federal and State Laws

Distribution methods were affected by federal and state laws. Suppliers attempted to control the retail price of gasoline, the quantity and quality of gasoline, and the quality of stations. Vertical price fixing or resale price maintenance was declared illegal in 1911. But various loopholes in this per se illegality were created. In the 1920s, the courts ruled that use of an agent or consignee was an exception to the vertical price fixing illegality. Many suppliers shifted to wholesale and retail agents and consignees. With the elimination of the exception in 1964, suppliers instituted massive shifts away from the agency and consignee distribution methods. Yet one exception remained. The retail price of gasoline at company operations could be controlled by the supplier. This created an added incentive to use company operations.

State and federal legislation created another loophole to the vertical price fixing illegality in the form of fair trade laws. Branded suppliers were permitted to control the retail price of gasoline under these fair trade laws. The 1950s and 1960s witnessed a diminution (sic) in the effectiveness of these laws and at the

federal level the antitrust protection afforded them was repealed in 1975.

Two additional federal laws affected marketing decisions. The Robinson-Patman Act prohibited price discrimination. Functional discounts, competitive price allowances and many other pricing variations required careful crafting to fall within the convoluted and arcane provisions of the Robinson-Patman Act. On the surface, what may look like irrational behaviour may be nothing more than good faith efforts to adhere to the largely incomprehensible provisions of that Act.

The Petroleum Marketing Practices Act (PMPA) placed restrictions on the way refiners terminated or refused to renew dealers. The PMPA was interpreted in a flexible manner. Its very existence, however, forced a reexamination of many of the relationships between dealers and refiners, particularly in the area of rents and lease terms. Unquestionably, the cumulative impact of the rule against vertical price fixing, the requirements of the Robinson-Patman Act and the requirements of the PMPA caused refiners to emphasize company operations or indirect distribution in order to avoid the real and potential problems presented by these legal requirements.

D. Rent

Rents were controversial due to recent large increases and a restructuring away from volume-related to lump sum payments. Rents either were frozen or constrained from 1973 through the middle of 1979 due to federal regulations. Additional regulations were in effect in January 1981. Because of these regulations, it was inevitable that large increases occurred when controls ended. Rents were adjusted to reflect more than a decade of rampant inflation. Many refiners also switched from a rental tied in part to the volume of gasoline sold, i.e., a minimum fixed sum plus a cents-per-gallon charge in the tank wagon price, to a lump sum rental. This was probably due to two reasons. First, a lump sum had a tendency to promote higher volume sales because the cost per gallon goes down as the volume goes up. Second, by taking the rental charges out of the tank wagon price and putting it into a lump sum payment, the refiner ran less risk of running afoul of the Robinson-Patman Act. The latter

does not apply to rents, but does govern the retail price at which the product may be sold.

E. Data Analysis

1. Market Share Trends Prior to Decontrol (1972-1980):

- o The share of gasoline volume distributed through the indirect (jobber) system increased from 36 per cent to 52 per cent of the total gasoline volume with the remaining 48 per cent distributed through the direct network (company operations, open dealers and lessee dealers).
- o The lessee dealers' share of the directly distributed gasoline volume decreased from 66 to 52 per cent while company operations' share increased from 14 to 27 per cent and the open dealers' share remained constant at 20 per cent.
- o The number of lessee dealers decreased by 55 per cent and the number of open dealers by 50 per cent, while the number of company operations remained about constant. The average volume per station increased substantially with the average volume of lessee dealers increasing by 55 per cent, the average volume of open dealers increasing by 81 per cent and the average volume at company operations increasing by 71 per cent.
- o Within the direct network, the four largest marketers--Exxon, Amoco, Shell, and Texaco--accounted for very little of the increase in company operation relative share. Their share of all company operation volume declined from 18.1 per cent in 1972 to 7.2 per cent in 1981. These same four marketers increased their share of the dealer volume from 40.8 to 49.0 per cent of all dealer volume.
- o Within the direct network, the sixteen largest refiners accounted for almost all of the dealer volume increasing from 88 per cent to 94 per cent during the 1972-1981 period. They also

retained about the same percentage of all company operations in 1981 (58 per cent) as in 1972 (59 per cent).

- o The largest refiners relied heavily on dealers in the direct distribution channel. This reliance increased during the 1972-1981 period relative to the reliance on dealers by the smaller refiner-marketers.

2. Market Share Trends Since Decontrol (1981 through the end of 1982):

- o Most of the volume trends prior to decontrol continued with some exceptions toward the end of 1982. The relative share of the dealers (both lessee and open dealers) continued to decline until the end of 1982 when there was a reversal and a small but continuing increase. In a similar manner the jobbers' share continued to increase after decontrol until the end of 1982 when their share started to decrease. Company operations' share of the gasoline volume remained constant as it did during the control period.
- o The geographic retrenchment that started with decontrol affected the rural areas most and consequently, open dealers the most, since they are found more frequently in rural areas. Open dealers, which had a relatively constant share of the gasoline volume during the control period, started losing relative share after decontrol.
- o The trend toward fewer lessee dealer outlets pumping higher average volumes per outlet continued. The number of company operations decreased, continuing a trend started in 1977 when the number of company operations peaked.
- o A month-by-month examination of the trends since decontrol indicated that the volume of the company operations and dealers moved together while the same figures for the jobbers moved in the opposite direction, thus confirming the interdependence of the

parts of the direct distribution channel. When the company operations do well the lessee dealers do well and vice versa.

- o On average, a 1 per cent increase in company share volume resulted in a 0.27 per cent decrease in lessee dealer volume.
- o On average, a 1 per cent increase in total direct volume resulted in a greater than 1 per cent increase in lessee dealer volume.

3. Market Concentration Since Decontrol

- o Concentration in state-wide markets was affected somewhat by the size of the market (i.e., the population of the states).
- o Concentration in state-wide markets was affected somewhat by increased company operations. A 1 per cent increase in market share produced a 1/5 per cent increase in concentration.
- o Concentration was affected by divorce legislation. Decreased company operations due to divorce led to increased state-wide concentration.
- o Concentration decreased if lessee dealers grew because of market forces (no divorce), but if lessee dealers grew because of divorce, concentration did not decrease.
- o Divorce did not necessarily increase lessee dealer volumes.

The data analysis indicated that the major factors affecting the market were the constant or declining gasoline consumption and the trend toward higher volume outlets. The greatest conflict was between the direct and indirect methods of distribution with the fortunes of the dealers and the company operations rising and falling together. Since divorce tended to hurt the direct network it tended to be detrimental to the dealers as well. The greatest tensions tended to be in the

geographic areas of overlap between the direct and indirect networks. The overlaps were caused by the artificial advantages created for the indirect system during the years of control.

F. Actual and Proposed Legislation Affecting the Supplier-Dealer Relationship

There are a number of existing and proposed legislative actions affecting the supplier-dealer relationship, including PMPA, divorcement, minimum markup, credit card, open supply, and uniform price. The tentative conclusions drawn from the analyses of these proposals are:

- o Any statute which constrains the way in which a supplier utilizes its dealer network will make the use of the dealer network less profitable to the supplier. These constraints provide an incentive to develop alternative distribution methods such as company operations or indirect (jobber) distribution.
- o The Petroleum Marketing Practices Act created substantive criteria for the termination or non-renewal of dealers. This Act often replaced more restrictive and inconsistent state laws, and with the flexible interpretation by the courts meaning that, on balance, the PMPA does not create significant incentives to use a particular distribution method.
- o Divorcement laws which require refiners to distribute without using company operations result in inefficient distribution and higher gasoline prices. They do not protect dealers from competition, since inefficient dealers would lose sales to more efficient marketers, particularly jobbers.
- o Minimum markup laws which require a guaranteed margin, appear to create significant incentives for suppliers to develop company operations, since that is the only way they can achieve high-volume, low-margin operations. Insofar as they are effective, these laws appear to retard the introduction of new, more efficient methods of distribution. They appear to raise costs by forcing competition into the field

of costly services for which consumers otherwise would be unwilling to pay. In the long run, the more efficient systems of distribution may prevail, but only after significant injury to the dealer network and to consumers.

- o Many states attempted to legislate against the imposition of credit card processing fees. Many refiners used these fees to recoup at least part of the increasing cost of using brand credit cards. Insofar as the processing fee charged those who used a service (credit cards) for the cost of providing that service, it helped to increase the efficiency of the whole system by reducing unnecessary costs. Consumers realized this and surveys showed that they accepted additional charges for credit cards as a fair charge for a needed service. If the suppliers are prevented from recovering their increasing costs in this area, the result is likely to be increased abandonment of credit cards to the detriment of both dealers and consumers.
- o At least part of the credit card problem is the Cash Discount Act. This Act explicitly prohibits the imposition of surcharges for credit transactions at the point of sale to the consumer. It does permit a retailer to offer a discount off the posted gasoline price for cash purchases. This irrational distinction makes it more difficult to charge those receiving the credit card service for the cost of that service.
- o Proposals for open supply attempt to make it possible for all dealers to shop around for gasoline supplies. In the short term this appears to increase competition at the wholesale level; however, it appears to have some potentially severe long-term costs. First, it may significantly reduce the value of the lessee dealer to the supplier. Predictability of demand is one of the advantages usually given for maintaining a lessee dealer network. Open supply may reduce this benefit substantially. Second, this provision also may reduce the incentives of the refiner to increase or even maintain the quality of its products and services. It may reduce the benefit for a supplier to undertake the expenses necessary to assure that it

produces a consistently high quality product and that the service offered at its stations are of a high order in terms of honesty, promptness, cleanliness and the like. This is because open supply may allow others to obtain part or all of the benefits without incurring similar expenses.

- o Uniform price legislation requires supplier price discounts to be uniform throughout a broad geographic area, often state-wide. These laws may be difficult and costly to enforce and may tend to result in higher, more rigid prices. Price competition may be reduced and prices may be less responsive to changes in costs. The inefficiencies and costs introduced by the requirements of uniform price laws may make the use of dealers less profitable for the supplier.
- o Taken individually each of these proposals generally may have significant costs. Taken in combination, as is usually the case, their effects may be severe. They may lead to increased prices and increased costs of distribution, limit competition, and create incentives to switch away from the dealer network to company operations or jobbers.

ITALY

The petroleum industry in this country is completely regulated. Regulations exist to control imports, strategic storage requirements, uniform prices throughout the country and all aspects of marketing. The regulations are expensive and counter productive. They (the regulations) deny consumers the benefits of increased competition and efficiency.

This situation is being identified as being unacceptable and the present government is examining programs to introduce deregulation.

APPENDIX C

THE COSTS BEHIND THE PRICES

APPENDIX C: THE COSTS BEHIND THE PRICES

This appendix examines the costs that refiners and marketers face in producing and distributing gasoline.

COSTS BEYOND THE CONTROL OF THE REFINERS

A substantial portion of refiners' costs are essentially beyond their control. This portion comprises four broad categories: crude oil acquisition costs, refinery consumption, federal and provincial taxes, and dealer margins.

Crude Oil Acquisition Costs

The single most significant factor in the cost of producing gasoline is the cost of the primary raw material - crude oil. Ontario's production of crude oil is very small. Almost all the oil processed in Ontario's refineries comes from Canada's western provinces, mainly Alberta, via the InterProvincial and Lakehead Pipeline Systems.

Until June 1985 the price of crude oil was controlled by an agreement between the federal government and the producing provinces. The total price paid by Ontario's refiners, including all taxes and transportation charges was \$39.05 per barrel. This is approximately equivalent to 25 cents per litre of gasoline.

Refinery Consumption

In the refining process a certain amount of oil is consumed, so that not all the oil processed is converted into useful products. Refinery consumption averages about 6 per cent of the oil charged. The effect of this is that the raw materials cost incurred in refining a litre of product is 6 per cent greater than the cost of a litre of crude oil. On this basis, the refinery acquisition cost per litre of product was about 26 cents per litre.

Federal and Provincial Taxes

Another cost component over which the refiner has no control consists of federal sales and excise taxes and provincial gasoline taxes. In May 1985 the federal excise tax was 1.5 cents per litre. The federal sales tax, calculated at 10 per cent of the wholesale price, averaged about 3.7 cents per litre for regular leaded gasoline.

As a result of the federal budget on May 11, 1985 the excise tax on gasoline and transportation fuels was increased to 3.5 cents per litre effective September 4. The budget also changed the method of calculating the sales tax to reflect more accurately any changes occurring in wholesale prices. The sales tax rate for the third and fourth quarters was 3.2 cents per litre for regular leaded gasoline.

During the period of the study, Ontario charged an ad valorem tax of 20 per cent on retail sales of gasoline. In the past, the tax rate was adjusted every quarter based on the outcome of a survey conducted by the Ministry of Revenue. Because of the volatile pricing situation, the level of tax often did not accurately reflect prices in the marketplace. The level of tax was therefore frozen since July 1984, pending the development of a more satisfactory method of determining the rate. The tax on regular leaded gasoline during the study was 8.0 cents per litre. The ad valorem tax has since been replaced with a flat tax of 8.3 cents per litre.

Dealer Margins

Dealer margins seldom vary significantly from location to location. That is because market conditions in most of Ontario have forced the refiners to guarantee their dealers a set margin, usually regardless of the retail price of gasoline. This margin depends on the refiner but is usually around 3 cents per litre. For the great majority of dealers in the refiners' networks, the dealer margins represent a fixed cost for the refiners.

Refining

Refineries are complicated plants which manufacture a wide range of products from a single raw material. Because these products are jointly manufactured, there is no single way to allocate the costs to individual product lines. Different allocation methods, all of them quite arbitrary, are used by different companies. A good description of the different allocation methods can be found in Texaco's submission to The Restrictive Trade Practices Commission titled "The Refining and Marketing of Petroleum Products in Canada", pages 51-62.

Rather than reflecting the actual individual costs of production, most of these methods seek to allocate costs, at least partially, on the realizations obtained in the marketplace. Thus, relatively high-priced products such as gasoline are assigned higher costs than relatively cheaper

products such as heavy fuel oil. Heavy fuel oil is normally sold below the cost of the crude oil from which it is made. Often it is charged only with the cost of the crude oil and does not bear any of the operating costs of the refinery. Consequently, premium products such as gasoline have to bear a disproportionate share of the costs.

Marketing

The cost of marketing gasoline is centrally allocated. The information available suggests that the additional costs of northern Ontario marketing are not recovered in the higher retail gasoline prices.

Distribution Systems

All refineries in Ontario are served by product pipelines that distribute gasoline to major terminals in southern Ontario. The refineries operated by Texaco in Nanticoke, Petro-Canada in Oakville, and Gulf (now Petro-Canada) in Clarkson are served by Trans-Northern Pipelines Inc., whose tolls are regulated by the National Energy Board. Two pipelines connect four refineries in the Sarnia area (Esso, Shell, Suncor, and Polysar) to terminals in Toronto. These pipelines are not regulated. Their rates are not published, but are similar to the Trans-Northern rates. Gasoline from these refineries can move further eastward on the Trans-Northern system.

Gasoline is also moved by marine shipment to terminals in Parry Sound, Sault Ste. Marie, and Thunder Bay. Individual service stations may be supplied directly from major terminals located at the refineries, on the pipelines, or along the Great Lakes. Alternatively, they may be supplied from "bulk plants" located across the province which are in turn supplied from the major terminals by road or rail.

The Ottawa area is often served by the Trans-Northern system from refineries in Montreal. Gasoline also enters northwestern Ontario by rail or truck from a pipeline terminal in Winnipeg. Communities such as Kenora are generally served by this route. Terminals in Thunder Bay are occasionally served from Winnipeg, particularly outside the shipping season.

Distribution Costs

Confidential data provided by the oil companies on their northern activities reveal considerable variation in distribution costs, depending on the capital investment that individual companies have made in specific locations. A company with the cheapest distribution costs in one area often incurs higher-than-average costs in another. Generally, however, the costs of the most efficient distribution network in any area influence gasoline prices there.

All the major oil companies maintain bulk plants throughout the province to deliver petroleum products to areas where direct deliveries are not feasible. These bulk plants are operated by agents who are paid a commission for selling and distributing branded products.

Most of these agencies were established primarily to serve the heating oil market. The contracts between the agent and the oil company are usually geared to heating oil sales. Gasoline deliveries represent additional business to the agent. He charges the oil company a competitive price for delivering gasoline to service stations in his area. In this case, competitive prices are those which match the prices offered by independent contract carriers.

In addition to the amount paid to the agent, the oil company incurs other expenses such as inventory costs. A part of the maintenance cost of the bulk plant would also be charged to gasoline sales.

Table 3.3, based on data from several companies, shows gasoline delivery costs for particular service stations in selected communities. These data suggest three conclusions:

- There are underlying cost differences between communities reflecting their geographic accessibility within the distribution network. On average, gasoline delivery costs to large stations in urban areas of northern Ontario exceed costs to stations in the Toronto area by about 1.5 cents per litre. For smaller stations in locations more remote from the large terminals, the cost of gasoline delivery is as much as seven cents more than in Toronto.

- Within each community costs vary for non-geographic reasons. In the Sudbury area, for example, agent deliveries are more expensive than direct deliveries from southern terminals. But they serve stations whose tank storage is too small to make direct delivery feasible. Thus local delivery costs are affected by the size of the drop.

- The costs of storage in terminals and bulk plants reflect not only the total operating costs of the facilities but also the volumes of gasoline over which these costs are distributed.

RETAIL PRICES AND REFINERS' MARGINS

From the perspective of the refining industry as a whole, the margin realized on all products must be relied upon to cover all the costs of the operation and to earn a return on investment. It is estimated that, in 1985, an all-products margin of about 6 cents per litre was required to cover all costs without any return on capital. In order to earn a 10 per cent return on capital employed, the all-products margin would have to be increased to about 9 cents per litre.

At a pump price of 50 cents per litre of gasoline, the refiner had a margin of 7.8 cents per litre in May 1985 to cover his costs of refining, marketing, and distribution. In September that margin had dropped to 7.3 cents. If the retail price of gasoline rises or falls, the change directly affects refiner revenues.

The foregoing analysis reflects costs for regular leaded gasoline. However, about 50 per cent of the gasoline sold in Ontario is unleaded. Unleaded fuel costs more to produce and is generally allocated a higher share of total refinery costs than leaded gasoline, because the addition of lead is less costly than alternative methods of improving fuel performance. In addition, the tax rates are somewhat different, as shown in Table C.1.

In May 1985 regular unleaded gasoline cost about 2.5 cents per litre more than leaded gasoline, with premium gasoline priced higher again by another 1.5 cents per litre. By September, the spread between leaded and unleaded regular gasoline had reached 3.0 cents per litre, though the gap between unleaded regular and premium had shrunk to 1.0 cents per litre.

Unleaded and premium gasolines therefore usually contribute a larger margin to refiner operating expenses and are allocated a larger share of the costs.

TABLE C.1

FEDERAL AND PROVINCIAL TAXES ON GASOLINES AND DIESEL FUEL (¢/LITRE)

	FEDERAL			PROVINCIAL	
	<u>Sales Tax</u>	<u>Excise Tax</u>	<u>Road Tax</u>	<u>TOTAL</u>	
<u>May 1985</u>					
Regular Leaded Gasoline	3.7	1.5	8.0	13.2	
Regular Unleaded Gasoline	3.8	1.5	8.4	13.7	
Premium Gasoline	3.9	1.5	8.6	13.8	
Road Diesel	3.7	0	9.3	13.0	
<u>September 1985</u>					
Regular Leaded Gasoline	3.2	3.5	8.0	14.7	
Regular Unleaded Gasoline	3.5	3.5	8.4	15.4	
Premium Gasoline	3.6	3.5	8.6	15.7	
Road Diesel	2.9	2.0	9.3	14.2	

APPENDIX D

THE DISTRIBUTION NETWORK

Distribution Systems

All refineries in Ontario are served by product pipelines that distribute gasoline to major terminals in southern Ontario. The refineries operated by Texaco in Nanticoke, Petro-Canada in Oakville, and Gulf (now Petro-Canada) in Clarkson are served by Trans-Northern Pipelines Inc., whose tolls are regulated by the National Energy Board. Table D.1 reproduces the rate structure currently in force. Two pipelines connect four refineries in the Sarnia area (Esso, Shell, Suncor, and Polysar) to terminals in Toronto. These pipelines are not regulated. Their rates are not published, but are similar to the Trans-Northern rates. Gasoline from these refineries can move further eastward on the Trans-Northern system.

Gasoline is also moved by marine shipment to terminals in Parry Sound, Sault Ste. Marie, and Thunder Bay. Individual service stations may be supplied directly from major terminals located at the refineries, on the pipelines, or along the Great Lakes. Alternatively, they may be supplied from "bulk plants" located across the province which are in turn supplied from the major terminals by road or rail.

The Ottawa area is often served by the Trans-Northern system from refineries in Montreal. Gasoline also enters northwestern Ontario by rail or truck from a pipeline terminal in Winnipeg. Communities such as Kenora are generally served by this route. Terminals in Thunder Bay are occasionally served from Winnipeg, particularly outside the shipping season.

Tariff No. 26

Trans-Northern Pipelines Inc.

The rates named in this tariff apply on the transportation of refined petroleum products and are subject to Trans-Northern's Conditions of Transportation with any supplements and/or revisions thereto which may be issued from time to time.

RATES IN DOLLARS PER CUBIC METRE

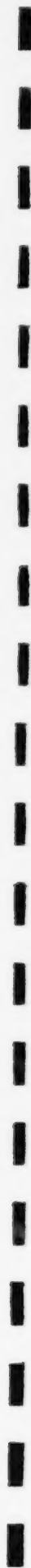
DESTINATION	POINTS OF ORIGIN					
	MONTREAL EAST QUEBEC	NANTICOKE ONTARIO	PORT CREDIT ONTARIO	CLARKSON ONTARIO	OAKVILLE ONTARIO	NORTH TORONTO ONTARIO
Dorval, Quebec (Jet)	2.076	9.929	8.763	8.840	9.007	8.380
Dorval, Quebec (Non-Jet)	0.992	8.845	7.679	7.755	7.923	7.296
Mirabel, Quebec	1.623	9.475	8.309	8.386	8.553	7.926
Cornwall, Ontario	1.907	6.978	5.812	5.889	6.056	5.429
Ottawa, Ontario	2.984	7.476	6.310	6.387	6.555	5.927
Prescott, Ontario	2.780	6.172	5.005	5.082	5.250	4.623
Maitland, Ontario	2.926	5.959	4.793	4.870	5.037	4.410
Hamilton, Ontario		1.219				
Oakville, Ontario		1.438				
Clarkson, Ontario		1.605			0.684	
Port Credit, Ontario		1.691		0.602	0.769	
Toronto Airport, Ontario		2.633	1.467	1.544	1.711	
North Toronto, Ontario		2.065	0.899	0.976	1.143	
Toronto Harbour, Ontario		2.400	1.234	1.311	1.478	0.851
Markham, Ontario		2.305	1.139	1.216	1.383	0.756
Port Hope, Ontario		3.244	2.078	2.155	2.322	1.695
Belleville, Ontario		4.150	2.984	3.061	3.228	2.601
Kingston, Ontario		4.945	3.779	3.856	4.023	3.396
Montreal, Quebec		8.369	7.203	7.280	7.447	6.820

EFFECTIVE JULY 1, 1985

Issued by
W.G. Burks, President
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APPENDIX E

HISTORICAL GROWTH OF THE RETAIL MARKET



Historical Growth

In the years following the second world war, gasoline demand in Canada, led by Ontario, grew enormously. In 1950 Canadians consumed an estimated 4.5 billion litres. By 1970 demand had grown to 20 billion litres.

The first oil price shock of 1973 had a major impact on the growth of gasoline consumption. However it was some time before more fuel-efficient cars and changing driving habits arrested the growth altogether. Consumption continued to increase until after the second oil price shock of 1979. Gasoline demand peaked in 1980 at 31.5 billion litres a year and has been declining since then.

The long period of seemingly endless growth in demand for gasoline shaped the marketing strategies of the refiners. The emphasis was on expansion, on acquiring prime locations and establishing an early position in high-growth markets. Market share was less important. Growth in demand meant that impressive volume gains could be realized without capturing a competitor's business.

A rapidly growing market is tolerant of mistakes. To guide investments, refinery marketing departments tried to predict where high growth would occur next. Inevitably, some of the predictions were wrong, and many service stations were built in the wrong places. But margins were high; labour and other costs were relatively low; and the total investment by an individual dealer was very small. The expanding and profitable retail networks were able to carry unsuccessful stations that would quickly have failed in a less forgiving environment.

Changing Forms Of Competition

During the high growth period, dealers tended to build permanent clienteles and compete on service rather than on price. Most retail gasoline outlets were full-service operations. Fuel was pumped by attendants. The station also offered a variety of other services to the motorist, such as lubrication, tire repair, and maintenance. Often gasoline sales were too small to support the dealer even if margins were high. But automobiles of the day required frequent service, and the dealer was able to earn much income from the sale of products other than gasoline.

As the boom continued, a number of trends eventually combined to begin reducing a dealer's non-fuel sales. As cars became more complex, specialty maintenance shops began to appear, particularly in urban areas. Longer-lasting lubricants and tires reduced the frequency of simple maintenance tasks. The extension of warranties on new cars tended to transfer maintenance work from the service stations to automobile dealerships. The portion of a dealer's income derived from non-fuel sales began to decline.

Competition on service began to give way to competition on price. Retailers found that fewer and fewer customers were attracted to their maintenance and repair facilities, because motorists were no longer tied to their local gasoline station for such service. Many stations found their income declining. Increasingly, the station owners, who were usually the refiners, found themselves holding large investments in prime real estate that could no longer yield attractive returns. All these trends appeared first in southern Ontario.

Increasing Diversity

The reactions of the refiners to these trends increased the diversity of the marketing structure. Sometimes several small stations in an area were replaced by one or two larger stations built to compete on price. Self-serve stations were introduced to attract price-conscious motorists. Refiners created 'fighting' brands to compete head-on with independents by offering lower gasoline prices than the main brand stations. Other services, such as car washes, began to appear at stations, often in place of service bays.

These changes were not rapid or uniform. Self-serve outlets tended to appear first on arterial roads and in strip developments where specialty maintenance shops were hurting traditional dealers or where new bypasses had diverted traffic away from older stations. Residential areas were still served by full-service stations, which looked after the broader needs of a local clientele.

APPENDIX F

THE ECONOMICS OF SERVICE STATIONS

APPENDIX F: THE ECONOMICS OF SERVICE STATIONS

The operation of a service station involves many fixed costs. In a full-serve operation, pumps must be staffed; the buildings must be heated, lit, and maintained; and the operator must earn a return on his investment. In addition, there are some variable costs. As volume increases, more staff must be added to the pumps, while rental costs, which are usually based on the expected business opportunity at the particular location, are increased.

For a business to remain viable, its total costs (fixed and variable) must be recovered. At low volumes, the per unit costs are high. However, as long as margins exceed variable costs, the per-unit cost will decrease as volume increases.

Most gasoline retailers do not limit themselves to sales of gasoline, but offer a wide range of products and services to the public. Most of these are complementary to gasoline sales, such as tires, repair services, convenience stores, and restaurants. Gasoline sales attract customers to the other businesses, and vice versa. Some dealers operate businesses that are completely separate and whose success is, at best, marginally related to gasoline sales, such as heating oil distribution and farm implement sales.

In Ontario at the present time, most dealers receive a guaranteed margin on their gasoline sales of around 3 cents per litre. Depending on the local retail price, this represents 5 to 6 per cent of sales. Usually the associated business enterprise earns gross margins of 25 to 30 per cent of sales. As a result, a majority of dealers derive more than half their profits from sales of products other than gasoline. Gasoline sales are important, not only for the profits they generate but also for the additional customers they attract to the other businesses. For a dealer whose other business is not complementary, however, gasoline sales may account for a relatively small percentage of total sales and an even smaller percentage of profits.

Data provided by both the oil companies and the dealer associations indicate that a 24-hour service station with three bays operating on a single-shift basis (a common configuration) will derive about 80 per cent of its revenues from gasoline and 20 per

cent from sales of other products. When gasoline sales reach 3 million litres, the bays will be used to capacity, and incremental gasoline sales will not result in any further increases in sales of other products.

Figure F.1 charts the effect of this relationship on a dealer's operation by plotting the margin a dealer needs to break even at a given volume. Service station operating costs are derived from a number of sources and do not reflect the cost of any one company's outlets. While components of the costs may change from one location to another, total average costs are not greatly different from one region to another. Rents are assumed to be based on the business opportunity and are calculated at 0.8 cents per litre of gasoline plus 5 per cent of sales of products other than gasoline (SPOG). These figures closely parallel actual practice in the industry and eliminate the effects of higher average property values in the south.

At high volumes (more than 2 million litres per year) the sales of products other than gasoline are sufficient to cover the total costs of the station. Gasoline sales are profitable because they attract more business to the bays and because they earn a margin higher than their variable costs. A dealer in this position can afford to cut his margin (and therefore his price). If such a move results in higher volumes, it will attract more customers to his service bays. Even if the gross margin on gasoline declines, the profitability of the total business increases because of the extra repair activity.

At low volumes, the dealer does not have this flexibility. If the volume drops too low, the break-even margin becomes higher than the market will tolerate. At this point the relationship between sales of gasoline and sales of other products comes under strain. The dealer can no longer rely on sales of gasoline to attract enough customers to his service bays to pay for the costs of the business.

The dealer, to stay in business, has two options: raise the margin or increase sales of products other than gasoline.

If the dealer attempts to raise the margin on gasoline sales, he must first acquire the right to set his own prices. This can only be done by declining to accept guaranteed margins from the refiner. The dealer must therefore pay the full official wholesale price for gasoline. The retail price charged is high because he pays a higher wholesale price and collects a higher retail margin. This tactic can only be successful if the market in the neighbourhood will support such high prices.

In an outlet offering repair services, there is a close relationship between sales of gasoline and sales of other products. Normally, for every dollar of gasoline sold, the dealer will sell 25¢ worth of other products and services. If the volume of gasoline and related sales is not enough to cover costs, the dealer may try to increase revenues by adding other products or services to the business. For example, he may deliver fuel oil, operate a general store, or deal in snowmobiles or farm equipment. Such business does not come to the dealer naturally as a result of gasoline sales. He must devote considerable time and effort to developing it. At this stage, the operator is not primarily a gasoline dealer but a businessman operating a diversified enterprise which has gasoline sales as one of its components.

Figure F.2 shows the amount of extra business that must be generated at various levels of gasoline sales in order to break even. It is assumed that the margin on this additional business is similar to the margins available on sales of products other than gasoline in a "conventional" service station.

An outlet that sells 200,000 litres of gasoline in a year will require sales of other products totalling about \$140,000 a year in order to break even. This is substantially more than the value of the gasoline being sold. At 500,000 litres of gasoline sales, the required sales volume of other products drops to \$115,000, still a very substantial volume.

Above about 800,000 litres per year the dealer is better off running a complementary business, because gasoline sales will generate sufficient sales of other products to cover the cost of the station.

Figure F.3 shows the gross margin on sales of other products related to the gross margin on the sales of gasoline. Below a volume of 800,000 litres per year, the graph shows the minimum gross margin required for the station to break even. Above 800,000 litres, it is assumed that additional gasoline sales will generate more sales of other products.

A station selling 800,000 litres per year, on average, has a customer base of about 320 cars or 700 people. A station of this size is larger than many stations in small communities in northern Ontario.

The effects of volumes on a dealer can be summarized as follows: If a dealer sells large volumes of gasoline, then gasoline sales are either his primary business or they attract customers to other enterprises. If the dealer's volume is small, then gasoline sales are merely one component of a diversified business.

The economics of a self-serve station are quite different. Such outlets are located in high-traffic areas and concentrate on sales of gasoline. Their operating expenses are low, but capital costs are usually higher than for full-serve stations. Usually they are operated directly by the suppliers rather than leased to dealers. Sometimes maintenance and repair service bays associated with the station are leased to a dealer while the pumps are managed directly by the refiner. The dealer receives the benefits of the business drawn to the location by the presence of the pumps, but earns no margin on the sales of gasoline, and incurs none of the expenses associated with such sales.

Figure F.1
COST-VOLUME RELATIONSHIP
MARGINS REQUIRED TO BREAK EVEN

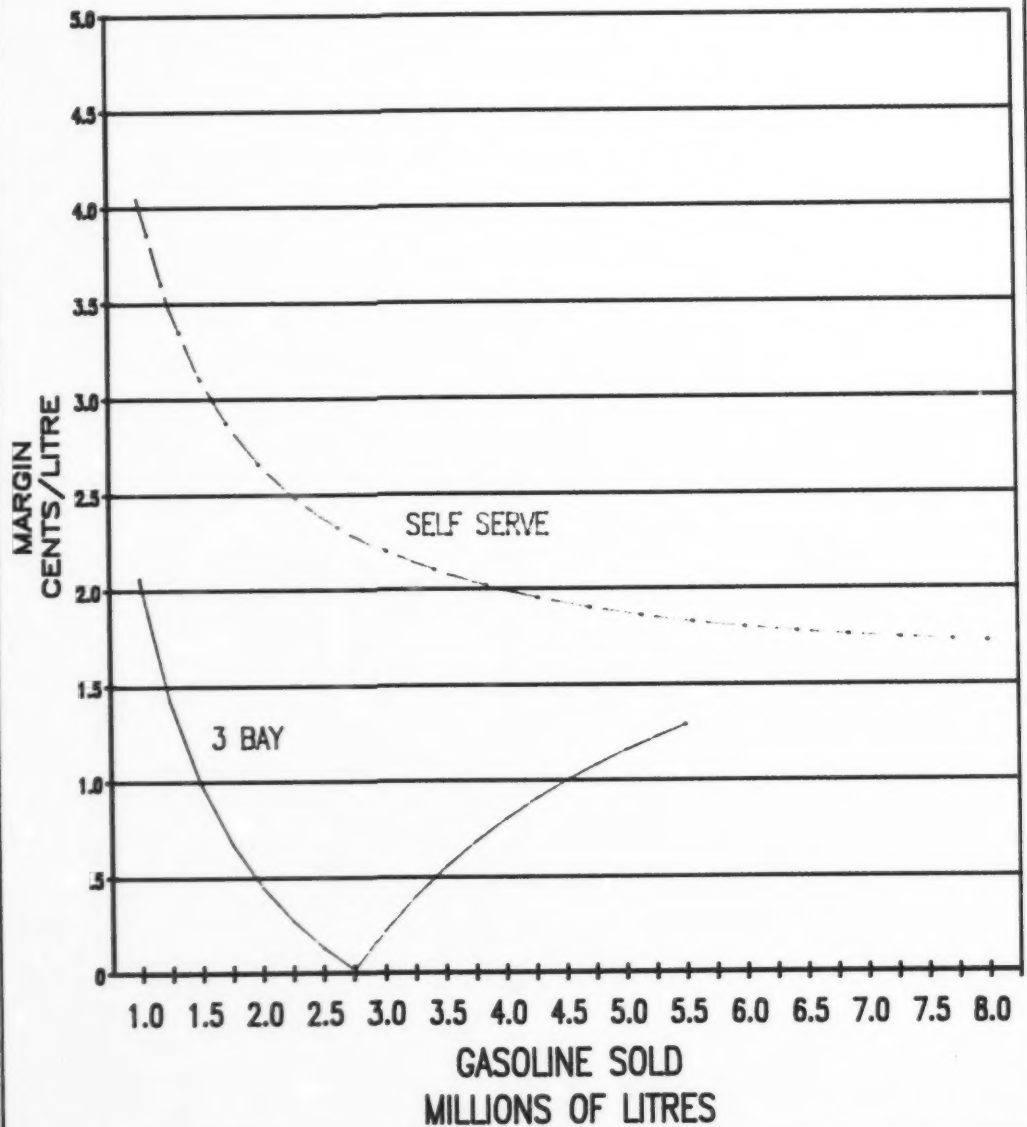


Figure F.2
SALES OF PRODUCTS
OTHER THAN GASOLINE
VOLUMES REQUIRED TO BREAK EVEN

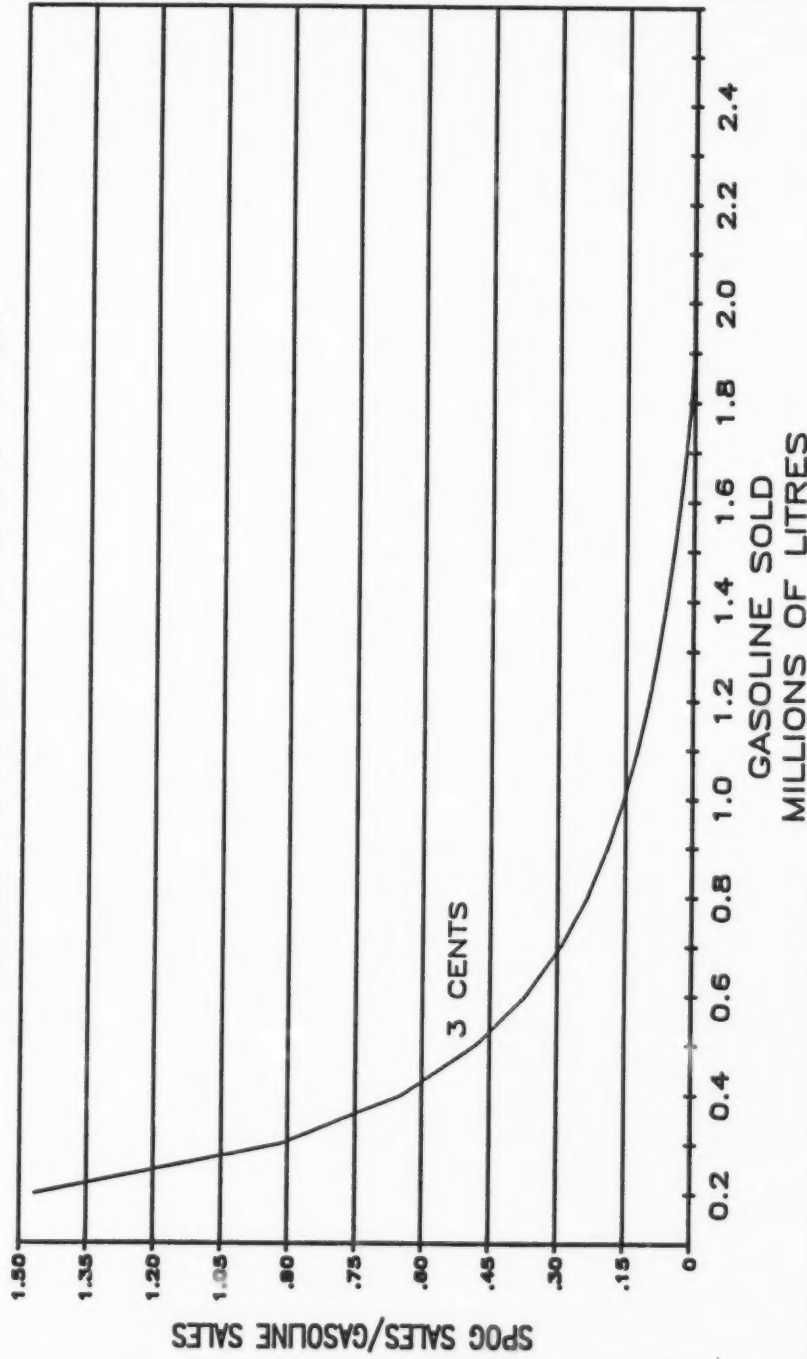
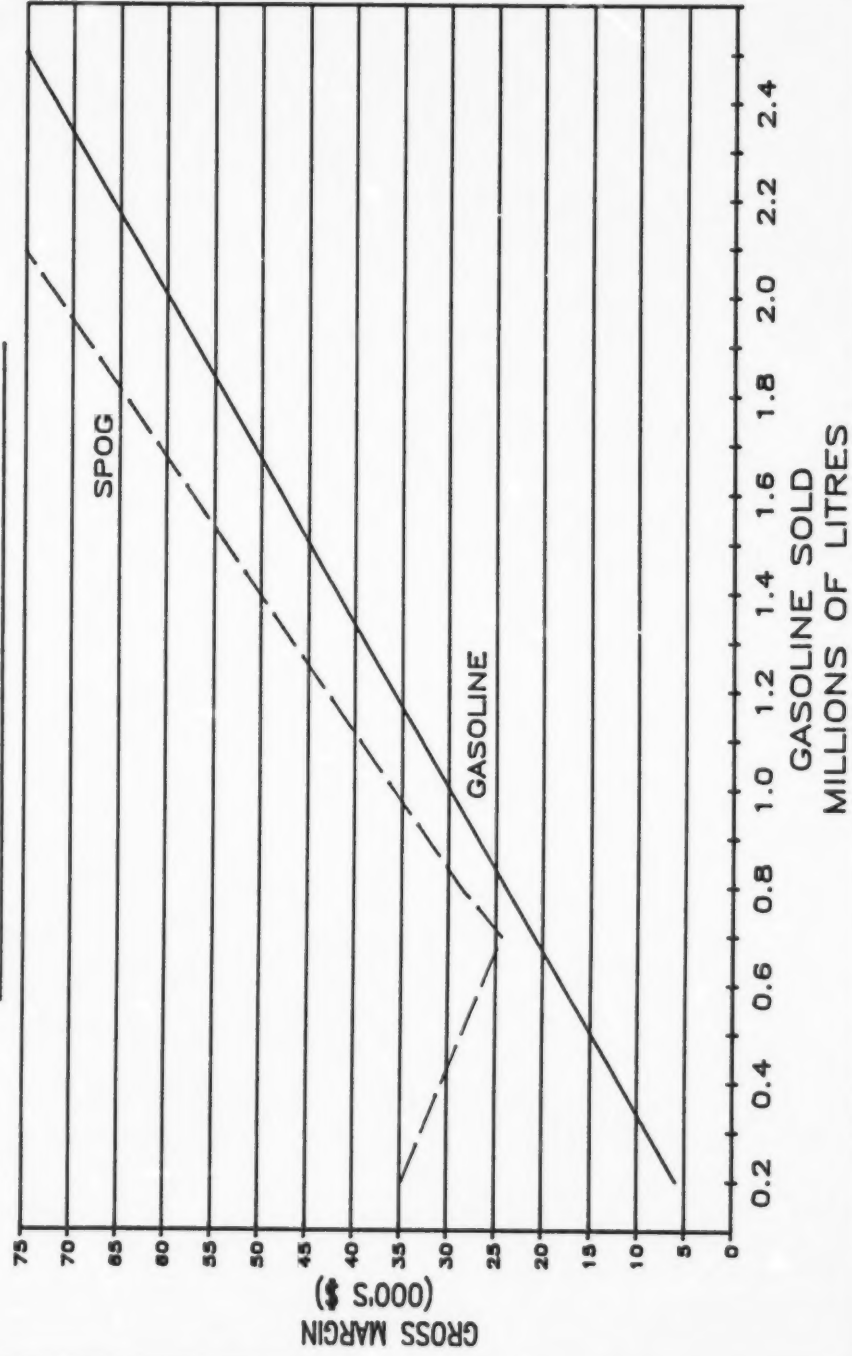


Figure F.3
SALES MARGINS
GASOLINE AND OTHER PRODUCTS



APPENDIX G

ELASTICITY OF GASOLINE SUPPLY AND DEMAND

ELASTICITY OF GASOLINE SUPPLY AND DEMAND

Increases in costs reduce the quantities of gasoline that suppliers will offer to the market at a given price. This puts upward pressure on prices. If prices rise, however, the demand for gasoline drops, because people either seek alternate modes of transportation or, over time, purchase more fuel-efficient cars. This lower demand exerts downward pressure on prices. The long-term effect of a change in costs on prices is determined by the relative sensitivity of both supply and demand to changes in price.

The economics of refining, like those of dealers, are very sensitive to volumes. Refineries are capital intensive, and the fixed costs are high. Refiners will therefore go to great lengths to maintain their utilization rates at high levels. For this reason, the supply curve, at least in the short run, is quite steep. In other words, refiners tend to keep supplying products even if costs go up and prices do not.

However, in the short run, the demand curve is also steep. Few people change their driving habits substantially because of small increases in prices. A one cent per litre increase in the price of gasoline will cost the average motorist about \$25 per year. The fact that both the supply curve and the demand curve are both steep makes the achievement of an equilibrium price very difficult and this is an underlying cause of price volatility.

If suppliers are faced with increased costs such as the recent increase in the federal excise tax, they usually try to pass on the full increase to the consumer in the form of higher retail prices. The market resists this move and a flurry of price changes ensues which eventually results in prices which, while slightly higher than they were previously, do not recover all the additional costs.

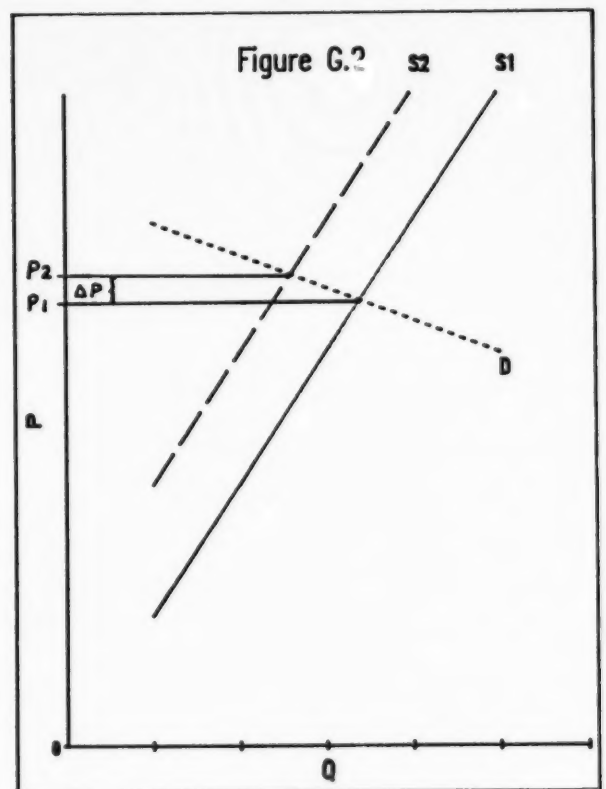
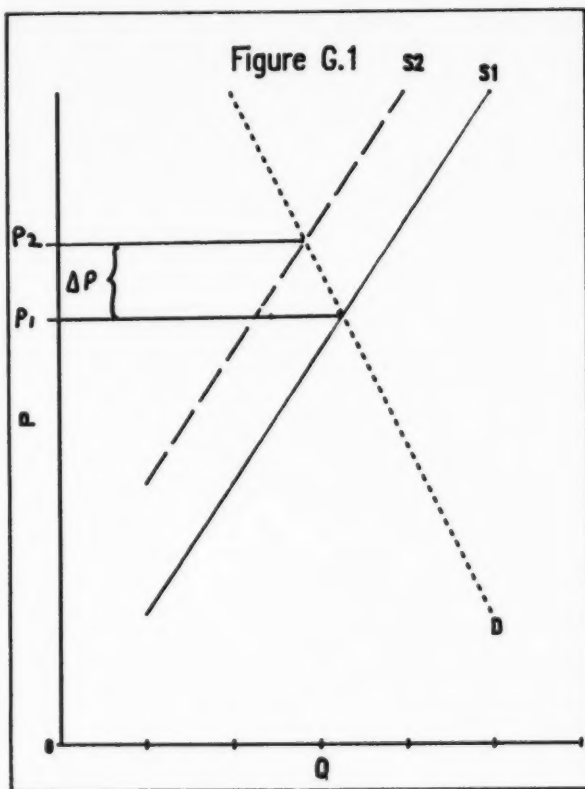
In areas which experience price war activity, the demand curve tends to be flatter in the very short term. When prices are low, motorists fill up their tanks because they know that a price restoration will soon occur. When prices are restored, they delay fueling and often purchase small volumes of gasoline because they have been conditioned to expect prices to fall once again. In the short run, this lowers the volume of sales and raises costs.

It also results in the refiners not being able to pass on the full measure of any price increases. This behaviour is demonstrated hypothetically in figures G.1 and G.2.

Figure G.1 represents a situation where both the supply (S_1) and demand (D) curves are steep. That is, the overall volume is relatively insensitive to price. An equilibrium price (P_1) occurs at the point of intersection of the two curves.

An increase in costs, in the short term has the effect of shifting the supply curve upwards to S_2 . This establishes a new equilibrium price (P_2). The change in costs (ΔC) is slightly greater than the increase in price (ΔP), indicating that the refiners will probably not be able to recover all their additional costs through a price increase.

Figure G.2 represents a situation where the supply curve is steep, but the demand curve is flatter because of the incidence of price war activity. In this case, the increase in prices is far less than the increase in costs, because the demand is more sensitive to price changes than is the supply.



APPENDIX H

DEVELOPMENTS AFFECTING FUTURE
GASOLINE MARKETING
IN
ONTARIO

CHANGES IN THE ONTARIO MARKET

Several recent and anticipated events will have an impact on the marketing of gasoline in the future. The impact of the most significant of these are discussed in this appendix.

RACK PRICING

In an effort to dampen price war activity, Imperial Oil has recently announced that it will institute a system of rack pricing. This system, described in detail at the Restrictive Trade Practices Commission hearing in Ottawa in October 1985, is described briefly below.

In the proposed system the cheapest wholesale price at which gasoline would be sold would be the rack price. This price would be available to high-volume customers who pick up the product at a refinery or terminal and would be published in trade journals such as Oil Buyer's Guide.

Esso would also offer a published direct-delivered price, established for specified geographic areas. To be eligible, a customer would have to purchase a minimum volume of gasoline and have sufficient tankage available to allow Esso to deliver the product efficiently. Discounts would be offered to high-volume customers, but never enough to reduce the price below the published rack price.

Where delivery is made to small accounts through an agent, there would be a third level of pricing. Again, discounts would be available, but they would never lower the price below the direct-delivered price.

Finally, these would be a wholesale price charged to the Esso dealer, which would be set for a geographic zone regardless of volume. The price would include delivery and all the costs associated with maintaining the brand name, such as advertising. The dealer would then be responsible for setting the retail price.

Under rack pricing, there would be no discounts off the rack price nor off the dealer price. Discounts off the direct-delivered price and the agent-delivered price would be geared to volume and would not lower the price below the basic rack price. The hierarchy of prices would be adjusted to reflect market conditions from time to time.

The declared reasons for this move to rack pricing are:

1. With the deregulation of crude oil prices by the federal government on June 1, 1985, contracts which had automatic escalation clauses tied to the price of crude oil became difficult to administer, as would an official wholesale price system geared to crude oil costs.
2. The concurrent removal of restrictions on imports and exports enlarged the market in terms of both the number of potential customers and the number of competitive suppliers.
3. The consignment and guaranteed margin systems were becoming increasingly costly to maintain.
4. The market under the existing system was becoming increasingly "irrational".

The fundamental forces at work in the marketplace - declining demand and excess product supply - would remain unchanged, ensuring a competitive market.

Esso has already started to introduce rack pricing in selected areas and has indicated satisfaction with the initial success. However, the areas selected in Ontario were Ottawa and northern Ontario, both of which leave histories of very stable prices. The real test of the system will come when it is introduced into the highly competitive markets of southern Ontario.

Much will depend in the reaction of the other refiners. While all of them have a vested interest in putting an end to price wars, some of them may see an opportunity to gain market share at the expense of Esso and other marketers who follow their lead. They might achieve this by, for example, pricing aggressively in a small area. Esso, assuming it will follow its own rules, would not be able to react without lowering the dealer price over a whole zone.

Perhaps recognizing such dangers, Esso testified under cross-examination at the Restrictive Trade Practices Commission that it would not rule out the possibility of temporary allowances.

If rack pricing does become common in Ontario, in a form similar to that envisaged by Esso, then some changes can be anticipated in the market.

- Price war activity will likely be dampened, because individual dealers will be unable to

afford the deep discounts that have been prevalent in the market, particularly in Southern Ontario.

- The underlying price, apart from price wars, will become more competitive, particularly in high-volume markets.
- Prices will be more greatly affected by wholesale prices in the northern tier of the United States than they are at present.
- Some dealers who are surviving on guaranteed margins will be squeezed out of the business.

With respect to the differences in prices between Northern and Southern Ontario, each of these changes will have a different effect:

The lessening of price war activity will tend to narrow the price differential because price wars are more common in the south.

- The effect of the lowering of the underlying price level will depend on the size and extent of the companies' zones, but will likely tend to widen the gap.
- The effect of U.S. markets and suppliers will be felt more in southern Ontario, which is closer to competing refineries. This would tend to widen the price differential between north and south.
- The effect on dealers within different areas is difficult to judge. It will depend partly on the attitude of individual companies toward maintaining market share in specific zones.

In general, the move to rack pricing will probably increase the underlying price differential between north and south slightly. However, this effect will likely be overshadowed by the decrease in price war activity expected in the south.

PETRO-CANADA TAKEOVER OF GULF

On September 1, 1985, Petro-Canada acquired the downstream assets of Gulf Oil from Ontario west, making it the largest retailer in the country, with over 4,000 retail gasoline stations.

In the Ontario market, this move concentrates 80% of gasoline marketing activity in the hands of four companies. While this will inevitably lessen competition to some extent, the market is still extremely competitive. Several of the other oil companies claim that they have been able to woo thousands of former Gulf customers who are reluctant to purchase from a national oil company. At the same time, other motorists who previously lacked convenient access to Petro-Canada stations may now patronize Gulf stations just because they are nationally owned.

Petro-Canada is now much more strongly represented at the retail level in western Canada and in northern Ontario, where the company had relatively few outlets prior before the Gulf purchase. It has also substantially increased the proportion of its business in the refining and marketing of oil products (the 'downstream sector'). In recent years, the upstream sector (exploration, development, and production of crude oil) has been the more profitable one. If this situation continues, Petro-Canada will have made a substantial investment in a low-margin business. At the same time, it has been announced that Petro-Canada will no longer serve as an instrument of public policy but rather will be run as if it were a private sector company.

The danger is that the federal government will be tempted to protect its national company by establishing an environment where it can survive even if its operation is inefficient. In such an environment, other companies either operate inefficiently or reap excessive profits. In either case, the consumer ends up paying more.

INTERNATIONAL FACTORS

The Western Accord of March 29, 1985 effectively removed most restrictions on the import and export of petroleum products, including gasoline. This will make the Canadian market in general, and the Ontario market in particular, much more susceptible to forces at work in the world market. Increasingly, Ontario refineries will have to compete with refineries in the United States and other parts of the world. At the same time, the same Ontario refiners will be seeking markets in the United States.

However, a number of factors will impede the full integration of the Ontario market with that of the adjacent states.

1. Canada permits higher levels of lead in gasoline than does the U.S. and the use of another additive, MMT, which is banned in the United States. Furthermore, the market demands a higher level of octane in Ontario than it does in the U.S. These factors combine to make the gasoline marketed in Canada different from that in the United States.

Oil refining is a very complicated process involving a large number of products being manufactured simultaneously. The addition of new products, such as new grades of gasoline, complicates the problem of operating an oil refinery efficiently and adds to the costs. Some domestic refiners may decline to participate in the U.S. market because of these extra costs. Similarly, some U.S. or overseas refiners may hesitate to produce special grades of gasoline for the Canadian market.

2. The retailing of gasoline in Ontario requires an extensive distribution and marketing system. While Ontario refiners have established such systems in the provinces, foreign refiners have not. To participate in the market, they must either build distribution facilities of their own or sell their product to others who have such facilities.

The existing Ontario refiners are all struggling for market share in an effort to keep their equipment operating at profitable rates. Their interest lies in denying access to their distribution systems to new market entrants. The natural customers for the offshore refiners are therefore the jobbers. However, to gain

access to a significant portion of the market, the foreign refiners or their jobber-customers will require much more extensive terminal facilities than are currently available. This impediment would be felt the most in northern Ontario because outlets there are further from potential import points than are stations in the south.

3. The prevalence of consignment selling in the Ontario retail market will make it very difficult for new market entrants to compete, particularly in areas where price wars are common. The recent move by some major companies to a rack pricing system was probably motivated, at least in part, by a desire to open the Canadian market to international competition. This move would be to the advantage of a multi-national oil company, enabling it to optimize its production at an international level and hence to operate more efficiently.

The U.K. Coal Strike

Despite these factors, the Ontario market will remain much affected by events taking place in the outside world. A recent example of an event that affected the Canadian gasoline market was the coal strike in the United Kingdom. Even though this occurred before the Western Accord, when there were more restrictions on imports, the strike depressed gasoline prices in Ontario. Faced by shortages of coal, utilities in the United Kingdom turned increasingly to heavy fuel oil for the generation of electricity. To satisfy the extra demand for heavy fuel oil, European refineries increased the amount of oil processed. This in turn resulted in excess production of gasoline, which lowered price levels throughout the world.

Export Refineries

Many oil-producing countries, in an effort to boost their revenues in the face of declining oil prices, have begun building refineries for the express purpose of exporting their production. These refiners are usually powered by energy made available at subsidized rates, either oil sold at artificially low internal rates or natural gas, produced in association with crude oil, which would otherwise be disposed of by flaring. Such installations are able to undercut most established refineries in the consuming countries of Western Europe and North America.

These refineries are just beginning to come on stream. As more are built, they will become an increasingly important factor in the relatively static gasoline market.

In the United States, imports of gasoline have reached such proportions that a substantial protectionist lobby has arisen, composed mostly of independent refiners who are hurt most by the new imports. The multi-national majors frequently have equity positions in the new refiners, and their existence is not threatened by them. Canada has not been as severely affected as the United States because its smaller market has not attracted the same level of effort on the part of the exporters, because of import restrictions prior to the Western Accord, and because of the lack of terminal facilities.

If the protectionist lobby in the United States is successful, Canada will be faced with a hard choice: to seek exemptions from any U.S. restrictions or to continue to allow free access to our markets by overseas refiners. To get exemptions from U.S. tariffs or quotas, Canada would have to adopt similar regulations to prevent overseas products from entering the United States via Canada. The result can only be higher prices for consumers. Alternatively, if Canada continues to allow free access to the Canadian market, the overseas exporters, having lost their access to the U.S. market, would probably become much more aggressive in pursuing other markets (such as Canada) which were still available to them. Canadian consumers would benefit from lower prices but Canada would risk losing the indigenous refining industry.

OIL PRICING

Since 1974 the Organization of Petroleum Exporting Countries (OPEC) has established the prices at which its members could sell their oil. While OPEC's share of the world oil market has gradually declined, most other producers have been reluctant to offer large discounts for fear of precipitating a price war. Recently, a worldwide surplus of oil has put severe strain on the pricing structure despite periodic downward revisions of the official price.

Saudi Arabia has recently instituted a system of "netback pricing" under which the price of its oil is determined by the prices its customers obtain for the products they refine from it. Under this system, rather than the price of oil determining the price of gasoline, it is the price of gasoline which

determines the price of oil. The new system is much more responsive to market forces. It will work well only as long as international trade in both crude oil and products is relatively free of restrictions. Under these conditions, it will increase the interdependence of national markets. From Canada's perspective, it will further increase the sensitivity of the Canadian market to foreign events. In addition, it should shift profits from the upstream to the downstream sectors. This will benefit the major integrated companies because their activities are more extensive in the downstream sector than in the upstream (that is, they are not self-sufficient in crude oil). It will also benefit Ontario, because increased downstream profits will generate tax revenue. But will hurt independent producers by putting downward pressure on crude prices.